National Library of Canada
Bibliothèque nationale du Canada

Canadian Theses Service
Service des thèses canadiennes

Ottawa, Canada
K1A 0N4

NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, tests publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30.

NL-339 (r. 88/04)

Canada

THE UNIVERSITY OF ALBERTA

TOUCHING BEHAVIORS OF INTENSIVE CARE NURSES

by

© CAROLE ANNE ESTABROOKS

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF NURSING

FACULTY OF NURSING

EDMONTON, ALBERTA

FALL 1987

Permission has been granted to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film.

The author (copyright owner) has reserved other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without his/her written permission.

L'autorisation a été accordée à la Bibliothèque nationale du Canada de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur (titulaire du droit d'auteur) se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation écrite.

ISBN 0-315-40989-4

THE UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR: CAROLE ANNE ESTABROOKS

TITLE OF THESIS: TOUCHING BEHAVIORS OF INTENSIVE CARE NURSES

DEGREE: MASTER OF NURSING

YEAR THIS DEGREE GRANTED: FALL 1987

Permission is hereby granted to THE UNIVERSITY OF ALBERTA LIBRARY to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

Carole Estabrooks

(Student's signature)

#116-9288 Cameron St.

Burnaby, B.C.

V3J 1L8

(Student's permanent address)

Date: September 8, 1987

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled TOUCHING BEHAVIORS OF INTENSIVE CARE NURSES submitted by CAROLE ANNE ESTABROOKS in partial fulfillment of the requirements for the degree of MASTER OF NURSING.

Janice M. Morse
Supervisor

Marion Allen

M Keating

Date: September 8, 1987

For the children

of touch gone wrong

ABSTRACT

This study examined intensive care nurses' perceptions of the meaning and use of touch in the intensive care unit (ICU). The study was conducted using the methods of ethnoscience, ethnography, and grounded theory. Interviews with eight experienced ICU nurses from the same ICU of a large urban hospital were the major source of data. Participant observation was also conducted in the ICU of a second urban hospital.

The findings of this study indicate that touch is used as a nursing strategy to meet the needs of both patients and nurses. In this study, the dimensions of voice, affect, posture, and emotional contact were identified in addition to skin to skin contact, whereas touch has traditionally been defined as skin to skin contact. The kinds of touch, normative patterns of touch within the ICU, and the touching process were described.

Three kinds of touch were identified: touch to communicate caring (caring touch), touch to accomplish a task (task touch), and touch to protect the patient and/or nurse (protective touch). Within this grouping there are five sub-seggregates: comforting, encouraging, working, controlling, and distancing and 27 discrete types of touch identified as components of these sub-seggregates.

Normative patterns of touch within the ICU were elicited. Three large and complex groups of variables, nurse, daily (contextual), and patient, combine and interact in a dynamic manner to determine the particular touching style of the ICU nurse in any given situation. These patterns of touch represent the first description of nurses' touching norms located, and as such begin to inform us as to the mechanisms of touch as a nursing strategy in the ICU.

The use of grounded theory resulted in the identification of a learned touching process and the process by which nurses acquire a touching style. Intrinsic to both of these

processes is the core process variable, cueing. By cueing, the nurses determines the kind and type of touch she will use in each encounter. Description of these processes, which have not been previously reported, begin to inform us about *how* nurses touch, and how they learn to touch. Both are critical to an understanding of normal touching, and subsequently to the ability to teach nurses about touch, evaluate its effectiveness, and recognize deviations in its use.

"What is *REAL*? . . . Does it mean having things that buzz inside you and a stick out handle?"

"Real isn't how you are made," said the skin horse. "It's a thing that happens to you. When a child loves you for a long, long time, not just to play with, but REALLY loves you, then you become Real."

"Does it hurt?" asked the rabbit.

"Sometimes," said the Skin Horse, for he was always truthful. "When you are Real you don't mind being hurt."

"Does it happen all at once, like being wound up," he asked, "or bit by bit?"

"It doesn't happen all at once," said the Skin Horse. "You become. It takes a long time. That's why it doesn't often happen to people who break easily, or have sharp edges, or who have to be carefully kept. Generally, by the time you are Real, most of your hair has been loved off, and your eyes drop out and you get loose in the joints and very shabby. But these things don't matter at all, because once you are Real you can't be ugly, except to people who don't understand . . . once you are Real you can't become unreal again. It lasts for always."

The Velveteen Rabbitt

ACKNOWLEDGEMENTS

The first acknowledgement must go to the nurses who participated in this study. Their unselfishness, honesty, and their struggle to help me understand touch are the foundation of this thesis. They exemplify the human dimension in an area that is often inhuman.

The second acknowledgement goes to my thesis committee. To Dr. Janice Morse for her insights, persistence, and guidance--and for letting me work independently. To Dr. Marion Allen for listening, reading, for her laughter and friendship, and for encouragement when it was most needed. To Dr. Norah Keating for providing fresh perspectives and for her kindness.

Third, I would like to acknowledge the generous financial support of the National Health Research Development Program (NHRDP) and the Canadian Nurses Foundation (CNF).

Fourth, I wish to acknowledge the bits and pieces of insight and encouragement from the women I had the good fortune as a graduate student to encounter: Peggy Anne Field, Phyllis Giovannetti, Miriam Hirschfeld, Carolyn Pepler, Rozella Schlotfelt (to whom I am indebted for introducing the term strategy into my thinking), and Thelma Wells. They each helped me to think. A special acknowledgement goes to Shirley Stinson who believed from the beginning that touch was important, who planted the historical seed in my thoughts, and who taught me to respect my abilities.

Fifth, I want to thank with love, Margaret G. McPhedran who is responsible for my choice of nursing as a career. She instilled the desire to learn and taught me much about personal and professional integrity. Perhaps most importantly Miss McPhedran cared about me as a person, and then, as a nurse.

Sixth, I want to acknowledge the efforts of Lee Cech who spent endless hours typing my transcripts, who always had words of encouragement, and who was not only consistent

throughout my thesis, but as well, throughout my graduate studies. I would also like to thank Pam Ratner for the hours of editing and the gentleness with which it was done.

Finally, I want to acknowledge the people who have helped me begin to learn about being real during these past two years. My new friends--Dave Shorten, Ann Lundy, Cathy Carter, Barb Janes, Joy Johnson, Pam Ratner, and last, but by no means least, Paula Finlayson who listened patiently for many hours to my growing pains and who I feel very fortunate in having met. Marilyn Merritt, my oldest friend, for long distance support when I most needed it. Donna MacIntosh for her unwavering support and love during many dark hours. And finally, a special acknowledgement to Pamela Sleeth who made suggestions about happiness that I sometimes found radical, who believed I would survive, and who guided me patiently through terrifying jungles that I have come to know are my feelings. Working at "getting real" has been the hardest work of my life and the greatest joy of my graduate education. It is also only a beginning.

TABLE OF CONTENTS

CHAPTER	page
I. INTRODUCTION	1
Statement of the Problem	1
The Context	2
Purpose and Rationale	3
Research Questions	4
II. LITERATURE REVIEW	5
Theories of Touch	6
Variables Affecting Touch	7
Effects of Touch	8
Touching Behaviors	12
Meanings of Touch	14
Summary	17
III. METHODS	20
The Qualitative Methods	20
Ethnoscience	21
Grounded Theory	21
The Research Techniques	22
Interviewing	22
Participant Observation	24
Data Analysis	24
Reliability and Validity	25

Sampling ____ 26
General Issues of Reliability and Validity ____ 27
Informant-Investigator Relationship ____ 28
Ethical Considerations ____ 29

IV. FINDINGS: KINDS AND PATTERNS OF TOUCH ____ 31
The Concept of Touch ____ 31
Kinds of Touch ____ 34
Touch to Communicate Caring ____ 34
Comforting Touch ____ 38
Encouraging Touch ____ 44
Touch to Protect ____ 48
Controlling Touch ____ 54
Distancing Touch ____ 59
Touch to Accomplish a Task ____ 63
Activities ____ 64
Working Touch ____ 66
Patterns of Touch ____ 72
Nurse Variables ____ 74
Types of People ____ 74
Types of Nurses ____ 75
Daily (contextual) Variables ____ 82
Daily Nurse Variables ____ 82
Daily Unit Variables ____ 83
Daily Nurse/Patient Variables ____ 84
Patient Variables ____ 85

Facilitators of Touch ____ 85
Inhibitors of Touch ____ 89
Mixed Effects on Touch ____ 94

V. FINDINGS: PROCESS AND FIELDWORK ____ 100
Cueing ____ 100
The Touching Process ____ 103
Entering ____ 105
Connecting ____ 106
Acquiring a Touching Style ____ 108
Learning to Touch ____ 108
Cultural Background ____ 110
Nursing School ____ 113
Work ____ 114
The Integrated Model ____ 116
The Fieldwork ____ 117

VI. DISCUSSION ____ 121
Critique of the Findings ____ 121
The Conceptualization of Touch ____ 121
Kinds of Touch ____ 124
Caring Touch ____ 126
Task Touch ____ 128
Protective Touch ____ 130
Patterns of Touch ____ 133
The Processes of Touch ____ 138
Cueing ____ 139

Personal Space 140
Learning to Touch 140
Critique of the Methods 143
Methods 143
Techniques 144
Interviewing 144
Fieldwork 145
Implications 147
Future Research 147
Adjuncts to this Study 147
Methodological Implications 147
Future Areas of Study 148
Nursing Education 150
Nursing Practice 151
General Implications 151
Implications for ICU 152
Summary of the Study 154

BIBLIOGRAPHY 157
APPENDIX A: Consent Form for Nurse Interviews 167
APPENDIX B: Consent Form for Nurse Participants (fieldwork) 169
APPENDIX C: Consent Form for Patients/Families (fieldwork) 171

LIST OF TABLES

Table	Description	Page
1	Biographical Characteristics of the Informants	23

LIST OF FIGURES

Figure		Page
1	Taxonomy of the kinds of touch	35
2	Variables determining patterns of touching	73
3	The process of burn out	78
4	Facilitators of touch	86
5	Inhibitors of touch	90
6	Mixed effect variables	95
7	The components of cueing	102
8	The touching process	104
9	Acquiring a touching style	109

I. INTRODUCTION

Statement of the Problem

The significance of touch to animal and human development is well documented (Harlow, 1974; Montagu, 1986). It is now accepted that touch is the most primitive of the senses--potent in its ability to fundamentally affect multiple dimensions of the human experience. To touch or to be touched is an act carrying complex physiological messages and complex psychosocial meaning (Burton & Heller, 1964; Frank, 1957; Weiss, 1979, 1986). Although, little is understood in either the physical or the emotional dimensions it is relatively easy to speculate that the mechanisms of touch can function positively or negatively. Freeman writes that "a healthy, productive life includes loving, human touch, which heals, soothes, nurtures and affirms the self" (1986, p. i) and Older (1982) devotes a chapter to "touch gone wrong." Touch, then, is not a dispassionate human act. It can be uniquely meaningful to human beings.

Touch is the cornerstone of nursing practice. An historical search of nursing literature for information on the use of touch in nursing practice (Estabrooks, 1987) revealed that touch was intrinsic to nursing practice, but implicit in the writing of nurses. The fact that the nursing profession accepts that touch is significant to nursing practice is evident in nursings' meaningful contribution to the relatively small body of literature on touch. Yet, adequate theoretical and practical understanding eludes us. Pepler advances the idea that "the study of touch incorporates multiple dimensions of man" (1984, p. 4). The literature on touch, when examined, reveals significant gaps--dimensions that have not been studied. Knowledge about the effects of touch is equivocal, little is known about the touching behaviors of nurses, and the variables and conditions that affect the amount and kind of touch have not been explicated. Further, and more serious, *touching* has not been studied, that is, we do not know *how* nurses execute the act of touching. If we do not understand how nurses touch, including the multiple factors that mediate this process, then we do not

understand a substantial and significant part of nursing practice. Existing research reflects an approach to the study of touch that, while it has been informative, has not addressed dimensions most in need of explication.

The Context

Intensive Care Units (ICU) have become increasingly sophisticated since their inception in the late 1940s. Historically this trend toward higher levels of technological function and the attendant technological expertise required has been viewed positively as medicine has pushed persistently against its traditional enemy, death. However, a recent trend has developed that can be traced to the publication of Naisbitt's (1982) book *Megatrends*. Naisbitt called for "high touch in a high tech world." This call has been taken up by health care workers (Cruise & Gorenberg, 1985; Shaver, 1986) especially in terms of critical care areas. The use of the term touch in these references is used to denote the human, caring qualities that are seen to have been lost with the invasion of technology. Martin Birnbaum, in an editorial appearing in *Critical Care Medicine* stated:

> The rate and magnitude of the influx of technology into the practice of CCM [critical care medicine] has resulted in an increasingly complex environment. In many instances, the nurse has become a data-gatherer rather than a care-giver, and the doctors responsible for the medical management of patients often seem to be performing decision making tasks using numbers to the exclusion of manual, physical assessments. The impact of these factors tends to decrease the interaction between members of the health care team. We have become technically inundated and emotionally disinvolved. . . . The environment has been allowed to become technologically intensive and care starved: *high tech and low touch* . . . . If our discipline is to survive in a way in which we want to continue to participate productively, we must work together to provide *high touch* (1984, p. 1006-1007).

There is a virtual absence of research on touch within the critical care context. Consequently, we do not know what mediates this direct, hands-on behavior of intensive care nurses, an intimate human behavior sanctioned by a society that also expects it. Nursing has traditionally been associated with caring and nurturing. Historically these qualities have not been valued by society (Ehrenreich & English, 1979), and it is only within the last twenty years that nurses have begun to systematically study caring as a concept central to nursing. It seems that now more than ever, such qualities are needed in

the ICU, particularly when increasingly sophisticated technology is being cited as an inhibitor to caring (Leininger, 1986a). It is difficult, if not impossible, to imagine nursing without touching, or to imagine that one human being touching another is not a potentially humanizing act with the potential to counterbalance the dehumanizing effects of technology. The results obtained in this study delineate the depth, significance and purpose of touch as it is used by nurses in the intensive care unit.

Purpose and Rationale

The purpose of this study was to examine touch from the perspective of intensive care (ICU) nurses. Culture informs behavior (Aamodt, 1981), that is, there are rules (norms) that serve as instructions to behave in a particular way (Aamodt, 1981; Spradley, 1972). Nurses constitute a particular cultural system (Aamodt, 1981) and it can be argued that ICU nurses form a further circumscribed cultural group. Soares (1978), using participant observation articulated norms of nurses' behavior in an ICU. She described how members of this culture used these norms and in particular, low verbal usage to protect their status of being in control. Hutchinson (1984, 1985) conceptualized a neonatal ICU as a cultural system, and argued that focusing on a small component of the larger society is an acceptable and useful concept for researchers (1984, p.82). Germain (1979) viewed a cancer ward as a discrete sub-culture. In her review of the literature she based her argument for the treatment of clinical units as cultural systems on such work as that of Goffman (1961) and Rosenhan (1973) who treated entire institutions as discrete subcultures.

If the ICU is conceptualized as a subculture it follows that there are norms that serve as instructions for ICU nurses to touch in particular ways, and a shared belief and value system. Many cultural rules are implicit (Evaneshko & Kay, 1982) and Soares (1978) has offered evidence that ICU nurses have not only an implicit, but a complex code of behavior. Qualitative methods are uniquely suited to examination of such implicit norms (Aamodt, 1981; Evaneshko & Kay, 1982) and were the methods used in this study. Touch was not defined *a priori* in order to retain as open an approach as possible to potential variations in

the connotative and denotative definitions and meanings of touch that the informants provided. The findings of this study begin to inform us about touch as it is used by ICU nurses, and reinforce the value of systematically examining behaviors that have, perhaps, been taken for granted because they are so much a part of everyday practice and seeming common sense.

Research Questions

The original research question was: What are the touching norms of intensive care nurses? The questions that evolved as the study progressed, guiding data collection and analysis were:

1. What meaning does touch have for intensive care nurses?
2. What are the touching patterns of intensive care nurses?
3. How do intensive care nurses learn touching behaviors?

II. LITERATURE REVIEW

Touch is a phenomenon that has not been systematically or extensively investigated. Two of the most neglected areas in nursing are research on the use of touch in critical care units, and research on the touching behaviors of nurses. Consequently, there are gaps in our understanding and questions about the certainity with which existing knowledge on touch can be used to guide nursing practice. The purpose of this review is to present a summary of existing knowledge on touch and to demonstrate the rationale for this study. The extant knowledge on touch is found primarily within nursing and the behavioral sciences. These two sets of literature were combined and are presented within five categories that emerged from the content analysis: 1) theories of touch, 2) variables affecting touching, 3) effects of touch, 4) touching behaviors, and 5) meanings of touch.

Before proceeding comment is warranted on the characteristics of the nursing and behavioral science literature. First, there is, generally speaking, little cross referencing between them. Nurses have, however, drawn more heavily on the behavioral science literature and been more influenced by it than have behavioral scientists been by the nursing literature. This influence is evident in deductive research designs, particularly in those studies relating to variables affecting touching and the effects of touching. Second, the two bodies of literature differ in that nurses have generally focused more on the effects of touch, and have conducted research in nursings' natural context. Third, both bodies of literature are similar in that they contain frequent reference to taboos against touching. They differ, however, in that, within nursing the taboo is most often discussed in cultural terms (Burnside, 1981; Clement, 1986; DeWever, 1977; Johnson, 1965) whereas, in the behavioral sciences literature, as well as the cultural factors (Burton & Heller, 1964; Levitan & Johnson, 1986) there is also the taboo that stems from the psychoanalytic teachings of Sigmund Freud (Levitan & Johnson, 1986; Older, 1977; Willison & Masson, 1986). The exception to this in nursing is the psychiatric nursing literature (Aguilera, 1967;

DeThomaso, 1971) where the same psychoanalytic influence can be seen.

The analysis of the literature is presented below. The chapter concludes with a summary of the status of the literature, identification of significant gaps in the literature, and the rationale for this study.

Theories of Touch

The dominant theory of touch is one of communication. Specifically, touch is considered as a mode of non-verbal communication (Duncan, 1969). Investigators have focused on effective tactile communication as critical to human development (Frank, 1957; Montagu, 1986; Older, 1982; Rubin, 1963). Many authors, (among them, Krieger, 1975; McCorkle, 1974; Montagu, 1986; and Weiss, 1979), suggest that the early mylenization of the tactile central nervous system tract accounts for the fundamental importance of the sense of touch. Montagu (1986) convincingly argued in a review of existing studies, many of them with animals, that touch was a fundamental and universal human need. This argument is widely accepted and no evidence exists to negate it. Barnett (1972a) and Weiss (1979) used existing touch/communication studies to develop theoretical frameworks of touch for nursing. Both have influenced subsequent nursing research (Clement, 1983; Copstead, 1980; Knable, 1981; McCorkle, 1974; Penny, 1979; Pepler, 1984). The theoretical linkages they proposed have not, however, been verified empirically.

In the nursing literature a second theory appears to be emerging, that is, one of caring and comfort. A body of descriptive (non-investigative) literature exists in which touch is frequently described as an act of caring (Amacher, 1973; Bernadino, 1985; Cashar and Dixon, 1967; DeThomaso, 1971; Dominion, 1971; Goodykoontz, 1979; Hollinger, 1980; Huss, 1977; Ujehly, 1979) or comfort (Ebersole & Hess, 1981; Wolanin, 1981). Some investigators link touch and caring (Clement, 1983; McCoy, 1977; Mitchell, Habermann-Little, Johnson, VanInwegen, & Tyler, 1985) although their attempts are cursory. Recently, Pepler (1984) described a theory of touch wherein comfort was the major goal. Morse (1983) proposed that "comfort is the major instrument for care," and

found that touch was a segregate of comfort. A caring/comfort theory of touch has not been systematically described, but may represent an emerging paradigm unique to nursing. To date nurse researchers have been heavily influenced by the prevailing communication paradigm, and by research designs used in other disciplines. As a result they have used predominately deductive approaches to examine various aspects of touch.

Although the communication paradigm dominates, there is no comprehensive theory of tactile communication (Major, 1981). The two most promising investigators in terms of theory development in the area of touch appear to be Weiss and Pepler. Weiss (1979; 1986) has done considerable work on the construction of a theoretical framework within which to understand touch in nursing practice. Her emphasis is predominately, although not exclusively, physiological and she views touch as the "silent language", that is communication underpins her work. Pepler, in her as yet unpublished work (1981a, 1981b cited in Pepler, 1984) has developed a framework of the concepts related to "nurse touch and patient comfort" (1984, p.11), and although communication is inherent, the fundamental thrust of her work seems to be toward a comfort paradigm.

Variables Affecting Touching

Considerable attention has been focused on the variables that are believed to be determinant of touching, namely, culture, personality, age, and gender/status. It is widely accepted that culture is a major determinant of touching behaviors and attitudes (Barnett, 1972a; Duncan, 1969; Frank, 1957; Goodykoonz, 1980; Hall, 1966; Montagu, 1986; Tobiason, 1981; Weiss, 1979) and that western society represents a "non-tactile" culture (Burton & Heller, 1964; Huss, 1977; Jourard & Rubin, 1968). No studies were located, however, that investigated subcultural variation so we know little about possible intra-cultural variation.

Personality as a variable has been studied by psychologists (Deethardt & Hines, 1983; Hoddinott & Follingstad, 1983; Jourard, 1966; Jourard & Rubin, 1968; Larsen & LeRoux, 1984; Lomranz & Shapira, 1974; Silverman, Pressman, & Bartel, 1973) with inconclusive

and conflicting findings, and has not been a variable of interest to nurse researchers. Age, on the other hand, is a variable addressed primarily by nurses. In the descriptive literature (Burnside, 1973, 1981; Dimond, 1980; Ebersole & Hess, 1981; Fitzsimmons, 1983; Hamner & Lalor, 1983; Roberts, 1980) most authors associate the increased age of the patient with an increased need for touch and a decreased amount of touch received. Findings of recent studies (Clement, 1983; El-Kafass, 1983) do not support this contention, or the earlier findings of Barnett (1972b) who reported that the elderly were touched less.

Extensive reviews of the behavioral science literature on gender and status differences (Major, 1981; Steir & Hall, 1984) attest to the emphasis that has been placed on this variable. Major (1981) and Steir and Hall (1984) thoroughly document the methodological problems, conflicting findings and competing hypotheses of some 100 studies in this group. There appears to be little consensus in the findings of these studies except that there are gender differences, the direction of which appears to vary with study design. Interpretations of the meaning of gender differences vary, with the early work of Henley (1973) on status and dominance, having been influential (Heslin, 1978; Sussman & Rosenfeld, 1978). With the exception of self-report studies (Jourard, 1966; Jourard & Rubin, 1968; Nguyen, Heslin & Nguyen, 1975; Summerhayes & Suchner, 1978), which are based on the unsubstantiated assumption that touch experience can be accurately recalled and reported (Jones & Yarbrough, 1985) investigators have not attempted to elicit the meaning or interpretation of touch from the participants themselves. Rather, they have superimposed deductively formulated interpretation on experience.

Effects of Touching

Investigators who have examined physiological indices have reported inconclusive findings (Drescher, Gantt, & Whitehead, 1980; Knable, 1981; Mills, Thomas, Paskewitz, & Katcher, 1976; Lynch, Thomas, Mills, Mallinow, & Katcher, 1974; Lynch, Flaherty, Emrich, Mills, & Katcher,1974; Lynch, Thomas, Paskewitz, Katcher, & Weir, 1977) or no effects (Mitchell et al, 1985; Whitcher & Fisher, 1979). Weiss suggests that the conflicting

nature of such findings in the physiological research on touch ". . . may be due to the inherent assumption of these studies that all types of touch carry the same meaning" (1986, p. 496).

The effects of being touched have generally been reported as positive when the dependent variable was non-physiological. Studies reporting positive effects have been conducted in a variety of settings. The non-health care settings include: libraries (Fisher, Rytting, & Heslin, 1976), college campuses (Goldman & Fordyce, 1983; Goldman, Kiyohara, & Pfannensteil, 1985), restaurants (Crusco & Wetzel, 1984), and laboratories (Drescher, Whitehead, Morrell-Corbin, & Cataldo, 1985). The health care settings include counselling sessions, and acute and long term care health agencies. Suiter and Goodyear (1985) report inconsistencies in the findings of the counselling research on effects of touch but no reports of negative effects. They do report, however negative effects of touch in their own research on counsellor trustworthiness. Pattison (1973) reported positive effects on self-exploration. Hubble, Noble and Robinson (1981), and Algana, Whitcher, Fisher and Wicas (1979) report positive effects on counsellor rating. A few investigators other than Suiter and Goodyear (1985) have reported that the effects of touch could be negative, as well as positive, suggesting that context, intent and meaning were important determinants of the perceptions or effects of touch (Algana et al, 1979; Fisher et al, 1976; Penny, 1979; Whitcher & Fisher, 1979).

Reports on the positive effects of touch in health care agencies are the most frequent in this category of the literature. To determine the effect of touch, investigators have used a variety of dependent measures, most often verbal and/or nonverbal measures (Aguilera, 1967; Knable, 1981; Langland & Panicucci, 1982; McCorkle, 1974, McCoy, 1977). Investigators have sometimes developed their own instruments (Aguilera, 1967; Langland & Panicucci, 1982; McCoy, 1977), but generally have not reported reliability or validity, or been clear on how the instruments were used. Others have used or modified existing instruments, for example, in 1974 McCorkle modified the Intrusa-Gram Worksheet, and

this was subsequently used by Knable (1981). Nonverbal behaviors were most frequently of facial expression and body posture. The independent variable, touch, appears to have varied in application so that it is impossible to determine if the intervention was similar in these studies.

Two investigators, namely, Birch (1986) and Penny (1979), studied touch in the labor and delivery setting using structured and semi-structured interviews. Their studies did not involve any intervention, but rather depended on the subjects' ability to recall their touch experiences during labor and delivery. Both reported positive patient perceptions of nurse touch during labor. Their work represents two of the very few studies that have gone directly to the patient for information on how touch affected them.

Three investigators measured the effects of touch on patients using various instruments. Copstead (1980) measured self-esteem using the Secord/Jourard self cathexis scale. Glick (1986) measured state anxiety using Spielberger's tool. Whitcher and Fisher (1979), using instruments they developed, measured patient satisfaction using as dependent variables, pre-op teaching and how much the patients liked the nurse. All of these investigators reported positive effects from touch, although Whitcher and Fisher also reported negative effects. Again there is wide variation in the type of touch used so that it seems in all of these studies that it is impossible to evaluate if the dependent measures were even an assessment of the same intervention.

Caution must be exercised in accepting the generally positive findings of these studies as conclusive. They are characterized by dissimilar samples, wide variation in contexts, variation in instrumentation, frequent omission of reports of reliability and validity, and definitional problems with the independent variable. As well, only immediate, short-term effects have been examined so we have no understanding of the possible long term effects of touch (Whitcher & Fisher, 1979). These factors combine to make interpretation of findings difficult at best and to make comparison between studies virtually impossible. It would seem that two factors need attention. First, clear conceptual and operational

definitions of touch are needed so that comparisions can be made between studies. Second, greater attention needs to be given to the use of dependent measures that are valid and reliable, and investigators need to begin to use the same instruments. With increased use of the same instruments, an increasing body of evidence substantiating the efficacy of instruments could potentially be developed. Furthermore, if there was some certainity that the same construct was being measured it would be possible to compare study results in a meaningful manner.

The findings of these studies, particularly nursing studies, generally are overwhelmingly supportive of the effect of touch as positive, and most of the descriptive literature on touch, especially in nursing, promotes touch as an always positive intervention. It does not seem that there is a sufficient or an adequate research base with which to support this. Major found a "clear positivity bias" (1981, p. 16) in her extensive review of the behavioral science literature on touch. Weiss (1979, 1986) also reports this and cautions against accepting the assumption that touch is always positive for the recipient. She maintains that: 1) the meaning (i.e., the qualitative nature) of touch is critical in the determination of positive or negative effects of touch, and 2) that determination of the meaning of touch is a function of a complex configuration of variables. Implicit within her arguments is the contention that the meaning of touch is inadequately researched and therefore poorly understood.

One final grouping of investigative literature reporting the effects of touch requires brief consideration--that which addresses the effects of therapeutic touch as it is defined by Krieger (1975). The present study was not intended to investigate *therapeutic touch* which is distinguished from *regular touch* in that it is a planned intervention that requires formal study. However, because touch was not defined *a priori*, it was necessary to have some idea of how therapeutic touch might interconnect with regular touch. The positive effects of this intervention are claimed to include alleviation of pain, anxiety, and promotion of the healing process (Keller & Bzdek, 1986). This, however, has not been demonstrated with

any consistency. Heidt (1981), for instance, reports reduction of anxiety but did not control for placebo effect, a major concern in this research. Randolph (1984), on the other hand using a more stringent design, did not find statistically significant results. Keller and Bzdek report relief of tension headache with therapeutic touch but the question of the placebo effect remains unsettled in their study. In a thoughtful analysis of the investigative literature on therapeutic touch, Clark and Clark (1984) report "that the current research base supporting continued nursing practice of therapeutic touch is, at best, weak" (p. 40). It seems that any contribution to this study from the therapeutic touch research lies in the non-touch (no skin to skin contact) characteristics of therapeutic touch, and therefore in the possibility of being receptive to the development of a broader definition of touch. As well, there is one report in the literature, a phenomenological study utilizing hermeneutical analysis, of patients' perceptions that caring distinguished therapeutic touch from other interventions (Lionberger, 1986). If there is a relationship between therapeutic touch and regular touch, it may be that caring, a concept familiar to nursing, is integral to this relationship.

Touching Behaviors

Studies that examine the touching behaviors of health care workers (HCW) are closely related to the present study, and to the literature on variables affecting touching. They are distinguished from studies examining the variables affecting touch by the specific concern of the investigators with understanding the touching behavior of those providing the touch (HCWs), whereas in studies designed to examine the variables affecting touching, the concern is primarily with the recipients of touch. Six studies were located (Barnett, 1972b; Clement, 1983; De Wever, 1977; El-Kafass, 1983; Mitchell et al, 1985; Watson, 1975). In each of these, data were collected within a framework that relied heavily on the preexisting work that suggested that touching behaviors are determined by such variables as age, sex and race. Attempts were made to correlate these variables with various aspects of touch (frequency, location, duration). The absence of inter-observer reliability measurements, critical with the use of observation, in Barnett's (1972b) and Watson's (1975) studies limit

the interpretation of their findings. Barnett reported that older patients (66-100 years) were touched less although, on close examination of the sample, they constituted only 3% of 540 patients observed. Both investigators reported that age, sex and race are variables in determining the amount of touch patients receive.

As well, frequencies of task versus non-task related touch were done by three investigators. Mitchell et al (1985) and Watson (1975) report that instrumental or procedural touch is used more than expressive or non-procedural touch. Clement (1983) reported more procedural than non-procedural touch, and suggested a positive correlation between the frequencies of procedural and non-procedural touch. El-Kafass (1983) studied only expressive touch, and Barnett (1972b) similarily studied only non-necessary touch. It is evident that one of the problems with this research is that there is no consistency in the terminology used to describe touch. Examination of these studies reveals that conceptual and operational definitions vary considerably and in some instances are absent from the report.

Three of these studies bear added attention because they relate more closely to this study. First, deWever 's (1977) work is relevant because she is the only investigator who attempted to examine touching norms--the implicit assumption being that there is a discrete sub-culture among HCWs with its own normative patttern of touching. Her study did not however, result in the identification of norms. One plausible reason for this may have been that she sought to elicit these norms from patients and not from the HCWs themselves by showing the patients pictures of touch situations and obtaining their response. Clement (1983) and El-Kafass (1983) studied touching behaviors using a deductive approach in adult critical care settings. Their findings are of particular interest because they both tested commonly reported findings and theoretical propositions in the ICU, and their studies do not suffer from some of the methodological and design difficulties of earlier work. Neither investigator demonstrated statistical significance in the correlation of sex and age of the patient with the frequency of touch received. As well, El-Kafass reported no statistically

significant correlations between frequency of touch and patient's race, time of day, or nurse's age. She did report a significant positive correlation between the frequency of touch and increased patient acuity, decreased level of consciousness, and pieces of equipment in the room. Clement reported a significant correlation between frequency of touch and diagnosis of the patient, and El-Kafass a significant correlation between frequency of touch and nurse's race. Consequently, it can be said that these two investigators' results suggest previously held beliefs (that age, sex and race affect frequency of touch) may not be valid, at least in the ICU.

All of these studies used non-participant observation to collect data except DeWever (1977). The problems of accurately observing and recording touch in a hospital setting are well described by Porter, Redfern, Wilson-Barnett, and LeMay (1986). These problems and problems of unsophisticated methods, superficial analyses (Barnett, 1972b; Watson, 1975), failure to use common instruments, or instruments with demonstrated reliability, and definitional problems result in findings with virtually no consistency. Moreover, a troubling question is raised as to the significance of the findings had they been consistent. While such research may tell us ". . . who touches whom, where and how often . . . little is known about the meanings that are conveyed" (Jones & Yarbrough, 1985, p.21).

Meanings of Touch

There is a paucity of investigative literature that addresses the meaning of touch. Attempts to elicit meaning have varied widely in methods and results. It is presented here in some detail because this literature is closely related to the present study both in content, and in some instances in the inductive approach. Some studies have been designed with meaning pre-determined by limiting response to a very few possibilities; constructing the design within a narrow context. Nguyen et al (1975) studied only gender differences, in 81 college freshmen and women as part of their introductory psychology course requirements. Subjects were asked to complete a questionnaire referring to a body map. The meaning of touch was pre-determined as: pleasantness, playfullness, warmth/love,

friendship/fellowship or sexual desire. The major difference was that men and women differ in their reactions to touch connoting sexual desire. Men viewed sexual desire in terms of the pleasantness and warmth/love categories, whereas, women viewed sexual desire as contradictory to these categories and those of playfulness and friendliness. In 1983 Heslin, Nguyen and Nguyen conducted a similar study using 208 undergraduate subjects, and adding the meaning category, invasion of privacy. They concluded that same sex touching was uncomfortable, that receptiveness to touch was dependent on the congruence between tactile and social intimacy, and that men place more importance on the sex of the toucher than women, who tend to value the degree of intimacy more and view their bodies as more vulnerable than men.

Pratt and Mason (1984) examined the meaning of touch in health care. Again, a deductive approach was taken and subjects were asked to categorize 28 care delivery situations into ten categories denoting the intent of the touch. Reports of reliability and validity are noticably absent from this study. Further, it is difficult to assess the method used to determine the situations and the categories, and examination of the situations and categories suggests questions of validity may be appropriately raised. Three findings are of interest in this study. First, the communication category was reported as inadequate, in that it apparently subsumed so many other meanings of touch that the authors recommend expanding it to sixteen categories. Second, subjects indicated that a restraining and controlling category was required. Third, the authors suggest that the pleasure receiving category was not utilized because it was not seen to happen, since it *ought* not to happen. This seems to be a rather substantial leap when one looks at the situations that were supposed to convey pleasure receiving which are, at best, ambigious.

Two well designed and reported studies were conducted in the labor and delivery area. Birch's (1986) study was similar to that of Penny's (1979) and utilized instruments modified from Penny. Semi-structured interviews were done with post-partum women to elicit their perceptions of touch received during labor. Both found overwhelming support

for touch as a positive intervention by both nurse and husband. Penny, whose study was more elaborate, also found that touch could be a positive or a negative experience depending on such things as the nature of the touch (e.g., touch to the pelvic area was perceived negatively probably because it was usually in the form of a vaginal examination). Equally interesting these investigators elicited patients' perceptions of the meaning of touch. Meanings such as reassurance, caring, security, pain relief, comfort, sympathy, encouragement, participation, and presence were reported. El-Kafass (1983) also reported as a minor finding from her study, eight descriptions of situations when expressive touch were used. These were, in descending order of frequency: reassurance, explanation, instruction, physical protection, orienting the patient, assistance, communicating caring, and comforting. These categories were derived from the observer's description of the touching situation recorded on the observation tool.

Three studies reflect an inductive approach to examining touching behaviors and the meaning of touch (Heslin, 1974; Jones & Yarbrough, 1985; Morse, 1983). Heslin developed a taxonomy of touch relationships although it is unclear how he developed it, proposing that such a set of relationships exists to decrease the ambiguity associated with the meaning of touch. His five relationships were: functional/professional, social/polite, friendship/warmth, love/intimacy, and sexual arousal.

Morse (1983) developed a taxonomy of the domain of comfort from interview data using healthy subjects. Touching and talking were the major segregates within the domain of comfort. Morse identified four types of comfort: touching, touching/little talk, talking/little touch, and talking. She suggested that situation, context and meaning may be major determinants of appropriate comfort interventions.

Jones and Yarbrough (1985) developed an extensive taxonomy of the meanings of touch. Data were collected by 39 undergraduate students in everyday settings, using participant observation. The seven major seggregates of touch meaning reported were: positive affect, playful, control, ritualistic, hybrid, task-related, and accidental. Subsumed

within these seven seggregates were eighteen categories of meaning, twelve of which were distinct and unambiguous. They proposed that only accidental touch is devoid of meaning. While the use of 39 data collectors raises the question of consistency in coding of the touch behaviors, this study is, however, one of the most important reported in the literature. It is the first study to investigate the meaning of touch within a natural context and to analyze the experienced perceptions of those engaged in touching.

Summary

A review of the literature on touch reveals that little is known with certainty. The lack of definitive findings is due in part to the influence of *a priori* assumptions. As a result investigators have used predominately deductive approaches which have focused on: 1) the measurement and correlation of demographic variables with various dimensions of touch, and 2) the effects of touch on recipients using tools that have not been demonstrated to measure touch effect. Meaning and context, central to the understanding of touch (Huss, 1977; Jones & Yarbrough, 1985; Mason & Pratt, 1980; Penny, 1979), have largely been ignored, and perceptions of those who touch and who are touched have not been examined (Jones & Yarbrough, 1985). As well, methodological problems, inconsistent reporting of reliability and validity, variation in sample populations and instrumentation, and problems in the definition of touch contribute to indefinite findings.

The most salient problems in the touch literature are discussed in the remainder of this section. First, the concept of touch itself is poorly understood. Although there is some allusion to this in the literature (Estabrooks, 1987; Jones & Yarbrough, 1985; Weiss, 1979, 1986) it appears as if most investigators have designed studies without reflecting critically on the question, what is touch? If the nature of touch is not understood, or we are unaware that it is not, then it is difficult to design research that will contribute meaningfully to our understandings of it. To date nurse researchers have predetermined in most instances the meaning and definition of touch by relying heavily on previous work that may have been done within entirely different contexts and which reflects a narrow conceptualization of

touch.

Second, there has been a positivity bias in the literature for which little empirical support can be found. Very few investigators have commented on the possible negative aspects of touch. No literature was located that addressed the negative use of touch by nurses, and only Penny (1979) and Burnside (1981) address touch as a potentially negative experience for patients.

Third, nurse researchers have 'established' that there are two kinds of touch, expressive and instrumental. These are given various labels, such as, *expressive, affective, non-task, non-procedural*, and *non-necessary* versus *instrumental, procedural, task*, and *necessary*. No evidence could be found to indicate that these two kinds of touch were ever generated from a research base, or have ever undergone validity testing. Should there be other kinds it would be difficult to discover them in studies designed to examine only these two.

Fourth, there is a virtual absence of research on the touching behaviors of nurses. Consequently we do not know what informs their behavior, or in what ways the touching experience may influence them. We do not know what touch means to nurses, why they do or do not use it, who they touch and when, how they determine who is touched and when, or how they touch. These are significant gaps in a profession where touch is integral to practice, and the members not only have society's permission to touch but are expected to (Ernst & Shaw, 1980; Mason & Pratt, 1980). Further, nurses have not been asked about touch. It would seem that they are the most likely ones to know about touch in nursing practice.

In light of the above, this study was designed to examine inductively, the subjective experience of intensive care nurses. An inductive approach was chosen in an attempt to address the four problem areas identified in the existing research. Such an approach permitted the exploration of: the meaning of touch, positive and negative aspects of touch, kinds of touch, and an examination of touch as it is used and perceived by intensive care

nurses.

III. METHODS

The purpose of this study was to examine touch from the perspective of intensive care nurses, that is, how did they conceptualize touch, what meaning did touch have for them, and how did they use it in their practice? The original guiding question was quickly expanded as the investigator began to realize the multi-dimensional complexities of touch, and receive confirmation that her original belief that touch as a concept was poorly understood was valid. It became necessary, in order to proceed with the study, to attempt to understand the concept of touch. Because the study addressed questions about which little was known, the answers to which were embedded in subjective perception and contextual meaning, a combination of qualitative methods were used.

The methods used in this study were ethnoscience, ethnography, and grounded theory. These methods were operationalized using various techniques of interviewing, participant observation, and data analysis. Consistent with the nature of inductive inquiry the methods and techniques used in this study were not 'set in stone' at the beginning of the study. Rather, the investigator let the data collection and analysis provide direction in making choices that facilitated thick description. This chapter is presented in the following manner: 1) the qualitative methods, 2) the research techniques, 3) the data analysis, 4) reliability and validity, and 5) ethical considerations.

The Qualitative Methods

Ethnoscience

Ethnoscience, a linguistic technique premised on semantic principles, was used to elicit the cognitive dimensions, that is, the *what* of touch. The results were a taxonomy of the kinds of touch (what touch is), and a schematic of the patterns or norms of touch (i.e., who is touched and when). The procedures and principles of ethnoscience enabled the investigator to elicit and order implicit knowledge that the informants had of one dimension (touch) within their culture (ICU). The patterns of touch were better presented

schematically, accompanied by textual description, than taxonomically. Interviewing techniques were the primary method of data collection for the ethnoscience method.

Ethnography

Ethnography was used to elicit the affective dimensions of touch, that is, to discern what meaning it has for intensive care nurses, or the why of touch. It also permitted the patterns of touch to be conceptualized as dynamic and interactive rather than as static. Ethnography was also appropriate because of its cultural foundations since the ICU was conceptualized as a discrete sub-culture whose members shared knowledge and behaviors specific to ICU. Interviewing and participant observation were used to collect data for ethnographic analysis. Ethnography as it is defined by Spradley (1970, 1979, 1980), that is, using both ethnography and ethnoscience, was the original method determined to be most appropriate for this study. The findings which are presented in Chapter IV resulted from the use of this method. During the course of data collection and analysis however, it became clear that there were processes inherent in the data. Spradley's methods were not sufficient in and of themselves to adequately deal with this process data, and therefore the investigator used the grounded theory method to analyze these data. This resulted in the findings presented in Chapter V.

Grounded Theory

In the process of conducting qualitative research, questions often arise from the data. One of the questions that arose during the course of this study was, how do intensive care nurses learn to touch? This question implied process, and the qualitative method most suited to examining process is grounded theory. Consequently, the analysis techniques of grounded theory (Glaser, 1978; Glaser & Strauss, 1967) were employed. The actual logistics of data analysis proceeded much as it does in all qualitative research at the descriptive level, but at the level of inference the grounded theory approach provided a more appropriate avenue of analysis.

Once the investigator began to think in terms of basic social processes and model

development, it became clear that the large and pervasive category, *cueing* was a core variable. The core variable met the criteria delineated by Glaser (1978) and provided unification of the generated theory. Much of the data which had not "fit" into already completed analysis then emerged as explanatory of the *how* of touch. The grounded theory analysis resulted in the identification of two substantive processes, *Acquiring a Touching Style,* and the basic social process, *Touching*. Intrinsic to these, and to the processes subsumed within them, was the core variable *cueing*. In this study the use of ethnoscience, ethnography, and grounded theory resulted in findings that were not separable. All of the findings combined to result in an interrelated, though incomplete picture of the touch gestalt, contributing to the development of a theory of touch.

The Research Techniques

Interviewing

Ethnographic interviews were the major data collection technique of this study. Interviews were conducted with eight informants from the ICU of a large urban hospital. One of the informants relocated after the second interview and had to withdraw from the study. The first round of interviews were completely unstructured other than to ask the informants to begin by talking about what they knew about touch in the ICU. Interviews were audiotaped, transcribed and analyzed before proceeding to the next rounds of interviews. Notes about impressions or the atmosphere of the interview were dictated immediately after each interview. The analysis from round one of the interviews resulted in the development of categories, and in decisions about the nature and course of the following rounds. Rounds two and three of the interviews were more structured with more directed questions, especially of the contrast type. They consisted of verification of analysis from round one, filling-in 'thin' areas of the interviews, and in card sorting (dyadic, triadic and *Q*-sorts). Informants sorted cards on the kinds of touch, ways to touch, activities, and nurse and patient variables affecting touch. The card sort of nurse related variables resulted in two categories, nurse and daily variables. From these card sorts the taxonomy, kinds of

touch and the schematic, patterns were constructed. In all of the interviews the categories response to touch, learning to touch, and touch/talk continued to emerge but did not "fit" into the kinds and patterns findings. Between the second and third rounds the investigator began to grapple with these categories as representing process. The final round of interviews were verification and *fine tuning* interviews. Informants were presented with the taxonomy, the schematic and the models developed from the process data. The final interviews were conducted either individually, or with three of the informants in a group interview with two of the thesis committee members present.

A biographical sketch of the eight informants is presented in Table 1. Each of them was interviewed in their off duty time at a mutually convenient location.

Table 1

Biographical Characteristics of the Informants

	Characteristics			
Informants	Age	Sex	Education	Years (ICU)
			RN 1977	
1	30	F	BN 1985	10.0
2	26	F	BN 1983	4.0
3	31	F	BN 1977	8.5
4	31	F	RN 1978	6.5
5	35	F	RN 1973	10.0
6	47	F	RN 1980	6.0
7	29	F	RN 1977	6.5
8	30	F	BN 1979	6.5

Participant Observation

The original plan at the outset of this study was to conduct a two part study that would consist of the interviewing component, and a six to eight week period of fieldwork in the ICU of a different hospital from that in which the above informants worked. During this period of fieldwork the plan was to do participant observation in the ICU, to interview a small number of patients post ICU, and to compare data from the two parts of the study. The rational for this was to develop a more complete picture of the use of and perceptions of touch in ICUs.

The fieldwork was actually conducted for a period of three weeks. This period of fieldwork and the reasons for its early termination are discussed in the critique of the methods presented in Chapter VI. It should be noted that the interviewing part of the study resulted in rich data. The termination of the fieldwork then, did not adversely effect the study results, in fact the analysis of the interview data resulted in a far thicker description than was originally anticipated. The factors that caused difficulty during the fieldwork enhanced data collection during the interviews. This will be discussed further in the section on reliability and validity when the relationship between investigator and informants is described. As a result of the early termination of the fieldwork, the findings from this part of the study are limited (see Chapter V).

Data Analysis

Data analysis proceeded in the following manner. First, the interviews were transcribed and the interview reviewed to check the accuracy of the transcript. Copies of the transcribed interviews were made and each page color coded so that it was latter possible, after disassembling the transcripts, to identify the informant and interview from which a quotation was extracted. The transcripts were then coded with highlighter and notations, disassembled, pasted on sheets of paper (one code per sheet), and then put in folders according to category. When a folder appeared substantial the contents were then re-sorted into sub-categories. Memos were made during this process and throughout the analysis of

ideas, possible connections, and tentative hypotheses. As well, a diary was kept of the investigator's subjective impressions. These were both read and re-read periodically throughout for insights, and to prevent loss of ideas. After the sub-sorting, brief outlines of category content were then written. As this process evolved it became clear that the original twelve to fifteen categories thought to be appropriate could be collapsed into six. These were: 1) kinds of touch, 2) ways to/characteristics of touch, 3) factors affecting touch, 4) response, 5) learning, and 6) touch/talk. As has been discussed the last three of these collapsed into process data and were re-analyzed using grounded theory approaches, resulting in two major processes, several sub-processes, and a core variable. From the sub-sorting of the first three categories cards with single words or phrases on them were prepared, and the next interviews scheduled.

The interviews from rounds two and three were analyzed in a similar manner except that the investigator sorted into already formed categories which served to saturate the categories. The emphasis was on eliciting similarities and contrasts, filling in thin areas of the data, and on identifying any new information in the data.

Final interviews were then scheduled and findings presented to the informants. From these interviews a fine tuning level of analysis occurred and adjustments were made. The group interview was of particular assistance as the interaction between informants served to create a more critical examination of the findings and provided valuable insights.

A final 'layer' of analysis occurred as the results were written. This could be described as cohesion analysis because it was at this point that previous connections within the data 'hung together' to provide an integrated picture. This cohesion occurred most noticably with the process data. During the period of analysis the investigator consulted with members of the thesis committee for direction and feedback.

Reliability and Validity

The primary responsibility of the qualitative researcher is to accurately render the lived experience of the participants so that the human phenomenon under study is presented as it

is perceived by the participants (Sandelowski, 1986). The fundamental assumption is that the participants know their world and this knowledge is truth. The onus of accurate rendition lies with the investigator and her ability to elicit this truth, recognize threats to it, and present it clearly. In this section the investigator will address issues of reliability and validity as they apply to qualitative research and specifically, to this study. Two approaches to evaluating the reliability and validity of qualitative research are the general approach (for example Sandelowski, 1986) and the sampling approach (for example Morse, 1986). In the first of these, sampling is subsumed as one of a number of issues, while in the latter sampling is the pivotal issue. Since both of these approaches are important, they are considered in the discussion that follows. The sampling approach is discussed within the 'sampling' section and the general approach within the section entitled 'general issues of reliability and validity.'

Sampling

This study was a factor searching (Diers, 1979) investigation concerned with meaning and understanding. Consequently, non-probability sampling was appropriate (Morse, 1986), and a purposive (Diers, 1979) or theoretical (Glaser, 1978) technique the most desirable, as it was consistent with the theoretical needs of the study. The sample in this study was purposively selected to maximize the investigator's access to data that were representative and contributed to understanding and insight (Morse, 1986) thus meeting the first of two evaluative criteria--appropriateness. The second criterion, adequacy, is reflected in the sufficiency and quality of the data. Before proceeding with a discussion of adequacy, the process of obtaining the informants is explained.

The supervisor of a large urban ICU was asked to approach six to eight nurses that might be interested in participating in the study. The supervisor was told that the investigator wanted experienced (i.e., thoroughly enculturated) ICU nurses who were interested in, and willing to discuss touch. After the supervisor had talked to the nurses the investigator contacted them by telephone. The result was a homogeneous group of

informants as can be seen in Table 1 (see p. 23). The group were all self-described 'touchers' who believed that touch was important to people and to nursing. They all gave candid self-descriptions of their role within the staff that were consistent with the investigators' own perceptions. They could all differentiate clearly between their own touching behaviors and those of the group generally, and could tell the investigator if a particular behavior was unique to themselves or likely to be representative of ICU nurses generally.

Adequacy, in qualitative research "is evaluated by the quality, completeness, and amount of information contributed by the informants" (Morse, 1986, p. 185). In this study categories were considered saturated when no new information was forthcoming, information was repetitive, and the investigator achieved a sense of coherence (Morse, 1986, p. 186). Reliability, as well as validity, is enhanced when the research categories are saturated, that is, when adequacy is achieved, according to Morse (personal communication, August 22, 1987). The quality of the data was determined to be adequate when data from the three methods used began to form an interrelated pattern. Secondary informants or negative cases were not sought in this study. However, the data analysis was verified with the original informants.

General Issues of Reliability and Validity

Reliability in quantitative research is concerned with regularity and repeatability. Alternatively, in qualitative research variation is sought (Sandelowski, 1986), and auditability, the ability of another researcher to follow the decision trail, is a more appropriate criterion. The decision trail of this study is presented throughout this thesis and must stand to be evaluated by the reader.

The data collection and analysis techniques used in qualitative research are considered to be a source of high internal validity (LeCompte & Goetz, 1982) because they derive the findings *from the informants*. However, Sandelowski (1986) suggests that a more appropriate criterion than internal validity for qualitative research is credibility. A study is

credible when "it presents such faithful descriptions or interpretations of a human experience that the people having that experience would immediately recognize it from those descriptions or interpretations as their own . . . . [and when others] can recognize the experience when confronted with it after having only read about it in a study." (Sandelowski, 1986, p. 30) This criteria was met during the verification interviews with informants when they recognized the findings as part of their lived experience in the ICU. It was also met when the findings were presented to ICU nurses not in this study and they recognized them as part of their experience. Further determination of the credibility of the findings in this study awaits the judgement of the reading audience.

The fieldwork part of this study probably suffered to some degree, from the "going native" threat to validity. It is for this reason that data derived from the fieldwork experience must be considered cautiously and only in terms of their contribution to the other findings. The investigator discussed the fieldwork contribution with members of the thesis committee as well, to try and achieve perspective.

Sandelowski suggests that rather than generalizability, a qualitative study should strive for fittingness. "A study meets the criterion of fittingness when its findings can 'fit' into contexts outside the study situation and when its audience views its findings as meaningful and applicable in terms of their own experience." (Sandelowski, 1986, p. 32). Determination of whether this study meets this criteria, beyond the verification already discussed, then must wait until the findings are disseminated and reaction received.

Informant-investigator relationship

The relationship that developed between the investigator and the informants must be discussed because it undoubtedly affected the data collection. The description of this relationship is essential in order that the validity of a study can be more adequately judged (Sandelowski, 1986). First, the investigator told the informants about her own background in ICU and about why she was studying touch from the perspective of ICU nurses. Second, the investigator self-disclosed to the informants her own experiences with touch

when it seemed appropriate and likely to facilitate discussion of areas that were particularly difficult for them. For instance, it was difficult for many of the informants to discuss the attitudes of ICU nurses to some patients or to discuss the use of 'bad touch.' They were concerned about misinterpretation and about being judged. However, if the investigator had had experienced similar things and revealed this the informants were more willing to talk. The result of this was that a relationship based on mutual trust and respect evolved. The investigator was seen as one of them. Frequently, when discussing ICU in general terms, they would say things like "you know how it is" or "you know what that feels like". On the lighter side, they sometimes looked at the investigator as if she were most peculiar when clarification was requested on seemingly (to them), obvious things. It required considerable effort on the part of the investigator to examine statements carefully so as to be certain that meanings were not assumed. The group interview was most useful in assisting with this last concern, both because three of the informants were there together, and because two thesis committee members were present.

Ethical Considerations

Ethical clearance was obtained from the hospital from which the informants came, and from the hospital in which the fieldwork was conducted. A second site was chosen for the participant observation so the informants participating in the interviews would not feel that the investigator was evaluating their nursing care, and/or 'checking up' on what they had told the investigator. Written consent was obtained from each of the eight informants (see Appendix A). Written consent was also obtained from each of the nurses and patients (or family member) that were observed during the fieldwork (see appendices B and C). All participants in the study had the right to refuse to participate or to withdraw at any time. Institutional and individual anonymity was maintained in the study report. The informants who participated in the group interview each agreed to do so, realizing that they would then become known to the other informants and thesis committee members present. Each had the opportunity to refuse to participate in the group interview. Audiotapes were erased on

completion of the study. Transcripts will be kept in a secure place for three years for possible further analysis.

IV. FINDINGS: KINDS AND PATTERNS OF TOUCH

Data analysis in this study resulted in three major groups of findings: 1) kinds of touch, 2) patterns of touch, and 3) the models, *Acquiring a Touching Style* and *The Touching Process*. Clarification of the concept of touch with informants occurred at all stages of the study and pervades the analysis of each group of findings. As such, it will be presented first, followed in this chapter by the first two groups of findings. In Chapter V, the third group of findings and the findings of the three week participant observation phase, will be presented.

The Concept of Touch

R: Can you define touch?

N: Touch? . . . I find touch very difficult to define 'cause to me there are two different types of touch. There is physical touch and there is emotional touch and you have to make the definition; like the bumped souls and the good back rub, like they are both good touches . . . one's on a physical plane and one's on an emotional level.

R: Are they entirely separate?

N: No, they overlap, they interact . . . . they're very much intertwined so I think any definition about touch would have to incorporate both the physical and the emotional and it would have to define, see definitions are hard things . . . . so touching is, touching is impossible to define.

This informant's statement summarizes the difficulty that the nurses had in trying to define touch in this study. There was no uniform definition of touch. Rather, what emerged was an incomplete picture of a complex gestalt. Touch was considered much more than 'skin-to-skin' contact and the nurses agreed that to define it in this manner would be to only capture a single dimension of a multi-dimensional concept. Their attempts to define touch ranged from the most vague: "I think it's sort of just like a vapor or whatever," to the narrowest: "One object meeting with another object with a sensation." Most attempts to provide a definition fell somewhere in between these extremes and attempted to include the 'other than physical' dimension.

N: [Is touch just a physical thing?] No I think you can have, I suppose you could have--oh dear--I don't know the word. Like eye contact . . . you probably call that maybe touch in a sense, that you're looking into the person's eyes, you're touching in that degree.

N: There's just the physical aspects, then there's the part that let's them know that I guess that you are there for them.

N: Any kind of contact with the patient 's touch--I'm thinking more about like, actually sort of laying on your hand.

N: Touch is a way of communicating I think.

N: I guess to me touch is a way of expressing myself with my patients, my co-workers and the family of the patients. And it's a way of showing caring, comraderie, empathy, understanding, support, concern um, and all of those types of things.

N: [Tell me what you mean when you talk about touch?] It would be that I am going to take care, I'm taking care of a person and I am giving them the physical and the psychological care, sort of total care, to make a person heal, get healthier or something.

As well as the physical 'hands on' and the emotional 'contact' dimensions, the nurses spoke of a verbal component to touch: "You can touch verbally too, you know." Throughout the interviews, 'touch' and 'talk' arose repeatedly in concert: "You can talk to a person and not touch them, that's true. And you can touch a person and not talk to them, but I think often that talking and touching do go together." The touch/talk variations were explained as being necessary for several reasons: used together they 'boost' the effectiveness of the communication by accessing more than one sense; talk is critical in entering the personal space of conscious patients; talk is a way to communicate if touch cannot be done; and touch is a more elemental form of communication and therefore commonly understood when language is self limiting, ". . . touch, universal language."

Posture, affect, and context, as well as talk, were described as essential in obtaining precision of communication with many of the touches. In the group interview, when trying to discriminate between scolding and commanding touch, the following took place:

N1: . . . like scolding is less a degree than commanding.

R1: So it's degree. It might look the same but one's more . . .

N1: That's right.

R2: And the tone would be different.

N2: Um hmm.

N1: Definitely--and body gestures.

It appears that the act of touching involves not only the nurse's hand on the patient's skin, but voice, use of the body, and in fact, the nurse's entire affect. When the researcher stated to one informant: "It [touch] involves the nurse's whole posture and presence and also has a definite verbal component," the informant replied, "Of course." It follows that these components of touching would all be part of the identifying criteria one would use in obtaining differentiation between touches.

Nurses, when they discussed the concept of touch, included not only the act of touching, but the importance of touch in their personal and professional lives:

N: I don't think you go by a day without, where you'd have a patient for the whole twelve hours--like you're always touching them, there's always touch and I think it's important to you in the sense you feel you've accomplished caring for that patient if you comfort them or talk with them, held their hand, talked with them . . . . you know you've accomplished looking after them well.

N: Everybody has to, has to touch to feel, to be at all on the emotional stable side.

N: If you're really sick and nobody touches you, I think you're missing out on part of your therapy of getting better.

N: I think we all need to be touched and hugged and cuddled and I wish I was [touched] more as a child. And I know I often hunger for that you know.

Several times informants told the investigator that although they couldn't prove it with research studies, they believed that touch was necessary for the recovery of the whole patient. It is apparently necessary for the nurse as well. One informant stated, " Nursing without touching, I just couldn't do it."

Informants expressed difficulty with trying to articulate a definition of touch, as one of them stated "I was so gung ho, I said 'yes I want to be part of this [study] because I believe so much in being touched' except now I am having a hard time to explain it, very hard time." However, they did know about touch in the ICU. The findings that follow represent three of the dimensions of touch that these nurses had implicit knowledge of within the

context of their personal lives and the ICU. They shared this knowledge even though, as one informant stated, "There's some words you can define and there's some words you can only describe--and that's touch."

Kinds of Touch

The findings presented in this section resulted from the ethnoscience research method used in the tradition of Spradley (1979), that is, combined with ethnography to elicit affective dimensions. The informants described three distinct kinds of touch: 1) touch to communicate caring, 2) touch to accomplish a task, and 3) touch to protect (patient and/or nurse). These three kinds of touch began to emerge from the data in the first round of interviews and were delineated further during the card sorts. From the initial categories, the card sorts, and a final verification interview a taxonomy of the kinds of touch was developed and is presented in Figure 1.

Touch to Communicate Caring (Caring Touch)

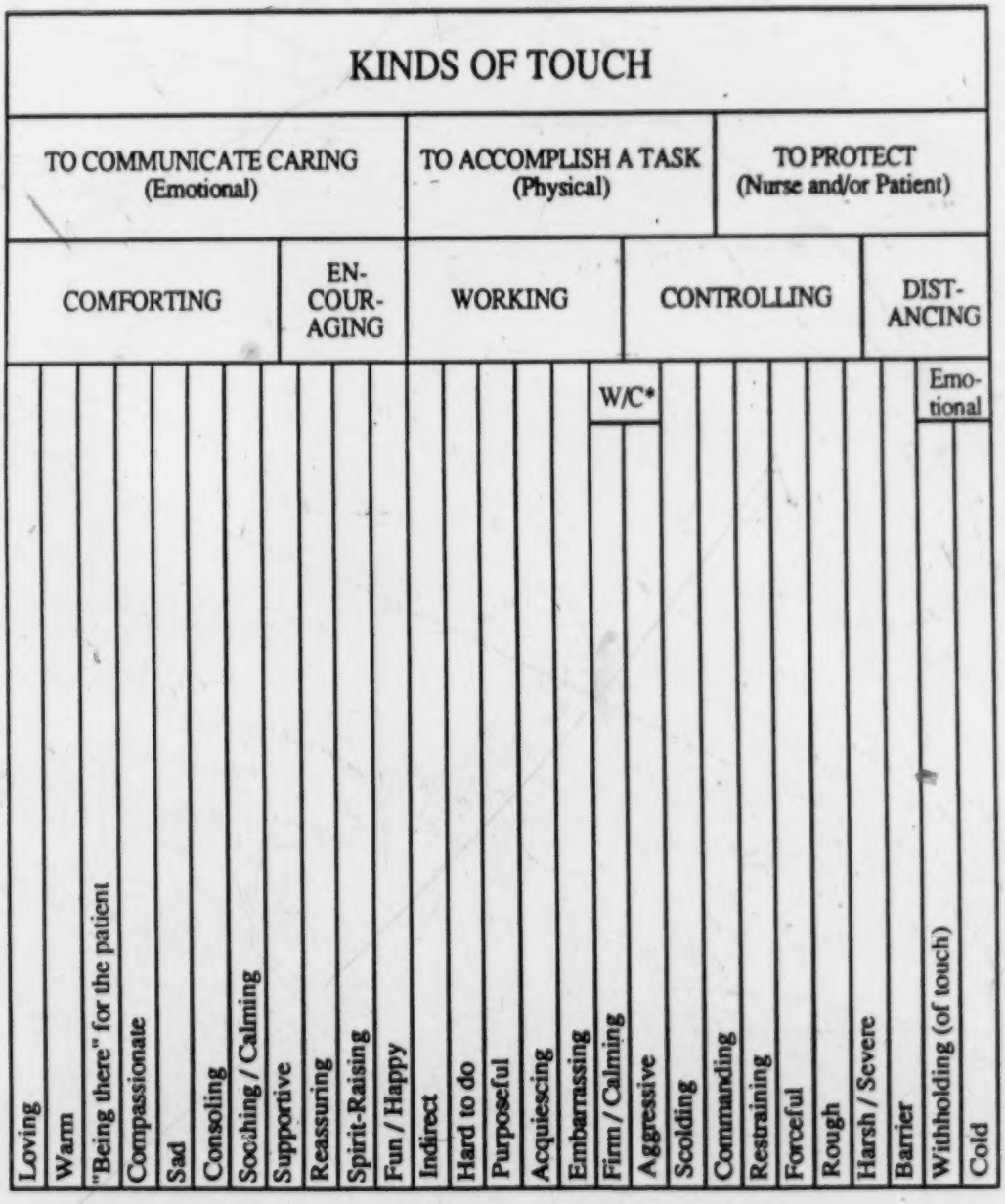
Touch to communicate caring has a predominately emotional intent, that is the dominant intent is to minister to the psyche of the patient. The nurse's motivation is rooted in a capacity to care about people. In an effort to distinguish this touch as unique and special, the informants referred to it in various ways: "touch-touch," "human-touch," "warm loving touch," "therapeutic touch," "extra-special touch," and "Then there's just plain old touch, I suppose, to show them you care." However, the term that eventually came to distinguish caring touch in discussions between the investigator and the informants was "real touch:"

R: When you talk about touch with all these, this lower touch and more touch group, what kind of touch are you talking about?

N: The extra-special touches.

R: All that stuff that was in the caring, comforting, reassuring--

N: The very positive, yeah, very positive touch.



*working/controlling

Figure 1. Taxonomy of the kinds of touch.

R: Is that what you mean mostly when you talk about touch to anybody?

N: Well, that is the *real* touch.

These nurses wanted to talk about caring touch because to them it was the *real* touch. The pages of the transcripts filled with reference to caring touch. They described it, tried to classify and label it, struggled to convey its meaning to them as individuals and as nurses, and recounted incidents where it had "worked" in their practice. Sometimes they cried, sometimes they laughed, sometimes they were sad and angry, and sometimes they shared small pieces of their most private selves with the investigator. Throughout the study, whenever they were asked what kind of touch they were referring to, they invariably said the positive, caring kind. Caring touch seems to capture the very essence of nursing for these nurses and seems particularly poignant in the ICU where normal channels of communication are often thwarted.

N: I wanted to show that I cared and I didn't know any other way because we were probably miles apart in terms of culture and personality types and all that sort of thing. And the only way I knew of showing him that I cared about the condition he was in was touching . . . . and as I said, it's the only way, there's not many ways I can think of showing people in ICU that you care about what's happening to them other than touch . . .

This caring touch can only be done by the nurse who has sufficient reserves of energy (physical and especially emotional) and who is possessed of the caring motivation.

N: If you care and if you have the energy, you touch a lot. If you have a lot of energy, like to me it's like a balance, if you have ten units of energy and no units of caring I can still give five units of touch. If I have five units of caring and five units of energy I could still give lots of touch--ten units of touch. If I have no caring and no energy I will not touch. You know, you sort of--if both things are high you give a lot of touch. If one is high and one is low then you still touch a fair amount but more moderately. If both are low then you wouldn't touch a lot.

N: I think that probably if I wanted to use touch in the most therapeutic method that would take a lot of energy because it's an emotional thing and it's my providing my emotional support and especially in terms of trying to communicate without speaking. If you've got a patient who can't speak, he's intubated, he's unconscious, whatever and you're trying to combine talking to them with touching . . .if you really want to be effective, I think it takes a lot of energy. I think it sometimes takes more energy than the procedural stuff.

All of the informants described caring touch as involving a giving of self. This is perhaps best captured by these words:

N: Definitely, it's [touch] giving a part of yourself to help somebody else and I think everybody at some point in their life has reached a point where they just haven't got anything left to give . . .

It appears that to use caring touch, the nurse must have a willingness and an ability to see the patient as a person and to enter into some degree of relationship with the patient.

N: It [touch] can be a powerful reinforcer of starting, continuing or ending a relationship. The relationship being a working relationship where it's going to be a short one and both are aware but--or it can be something that's just done on necessity. There's different, I see touch as having almost like a continuum, you have the type where you have, it's a necessary means of getting something done in the sense of a task or it's on the other end, it's a means of getting closer on a personal basis with a person . . .

All informants described reciprocity as a significant factor in nurse-patient touch. Caring touch is not uni-directional, that is, the nurse receives from the touch experience. This is necessary for her to continue to use touch as a strategy, and to store some of the energy required for touching:

N: . . . to have a little old lady squeeze your hand for reassurance you know, that's positive reinforcement for you as well. You're doing something for her and it's that kind of contact to me that is nursing . . .

Conversely,

N: Maybe because he doesn't respond to you, maybe there's no gratification for you in that . . .

N: I think . . . when you are developing a relationship, or trying to with a patient there has to be reciprocity . . . I have to feel that I'm getting something out of it too, giving and giving and giving and never getting back, it does burn you out

It is essential to experience reciprocity with at least some of one's ICU patients in order for the nurse to receive. Positive response to nurse touch is a significant way that nurses 'get' from patients. "It's a positive reinforcement and that they're giving to me something." The nurses described receiving a positive feeling when a patient reciprocates, a feeling of closeness and reward. Those shifts with a patient who reciprocated were "nice shifts." Reciprocity is closely tied to relating to the patient and "real interaction" where the patient is seen as person and not object.

The Sub-Seggregates

Caring touch has two sub-seggregates, comforting and encouraging. They, in fact,

'make up' caring touch, but consistent with the concept of touch as a gestalt, caring touch cannot be understood completely by reduction to its constituent parts. For example:

> N: For me comforting touch is one aspect of caring for the patient. I don't mean in terms of physical, to take care of, but I mean in terms of showing them that I care for them as a human being . . . I see comfort as one way of showing them that I care, and I use touch for that and in a lot of those things probably, like the confused patient, a lot of my touch there is actually to comfort the patient, to try and settle them and stuff. And in other instances it's to show them that I just care for them and that is to be of some comfort to them, but it isn't just to comfort them --do you know what I'm saying? Maybe it is one and the same thing.

Although comforting and encouraging are similar types of touch, they are different in many ways. The distinguishing features are that encouraging touch carries with it a connotation of hope and is a more boisterous touch:

> N: I think an encouraging touch is more enthusiastic than a comforting touch. A comforting touch is a quiet, softer sort of a touch and an encouraging touch, like you think in terms of a slap on the back, or you know the old "come on, let's give it the gusto" type of attitude and so it's a more boisterous--I don't know what.

It requires that the patient be able to interact on some level with the nurse, that is, be conscious although possibly intubated and unable to verbalize. This may account for comforting touch being referred to much more frequently than encouraging touch in the interviews as a majority of patients in this ICU are in a depressed state of consciousness. As well, the encouraging touches are more easily identifiable to an observer because the constellation of identifying criteria (context, posture, affect, and voice) are more evident with encouraging touches.

Comforting Touch

Although comforting touch can be, and most often is physical, that is, skin to skin, the intent is to provide emotional comfort to the patient: ". . . but the patient has an emotional aspect too, that without the comfort touch you're not really attending to." Analysis of the data on caring/comforting touch resulted in the identification of eight discrete sub-types of touch (see Figure 1, p.35), ranging from the most emotive and intimate, "loving" touch to the lesser emotive and intimate, "supportive" touch. With all of these touches, the informants discussed the difficulty one would have in identifying the discrete type of touch

by simply observing the skin to skin contact. In fact, this skin contact is not even required for the "being there for the patient" touch. In this group of touches, context and voice are the identifying criteria of most assistance in differentiating between the touches. In the group interview:

> N1: See so many of these, this category at the top, comforting and encouraging . . . so much of that is contextual. I don't think you could walk in and say, "oh yeah she is being there for the patient, she is being compassionate, she's consoling." We may all be doing the exact same thing, stroking our patient's forehead or holding their hand and yet it's all contextual based on the situation of the patient, the inner headset of the nurse and all these kinds of things and how the nurse and the patient interact.
>
> N1: So much of that is not so much, you touch this patient the same way when you're doing those things, but it's what you say, [that] makes you sad or consoling or soothing . . .
>
> N2: I think the combination of the context and what was said.

Nurses' affect and posture could be similar in all of these touches. However, even with the addition of context and voice there remains an element of intent that resides entirely within the nurse's mind and makes only the nurse touching able to, with certainty, accurately identify the specific touch.

The general characteristics of these eight comforting touches are that they are done: in a giving manner, in a personal way, soothingly, gently, softly, slowly, and with enough pressure so that the patient knows ". . . it was definitely a touch and not only a brush." As well, comforting touch most often involves the use of the palm of the hand as opposed to, for example, the finger tips which are used more frequently in the task touch. Stroking is frequently used in comforting touch: "A soft stroking of your hand on their head or hand or whatever."

Comforting touch is used alone or in combination with touch to accomplish a task. When it is used alone solely to provide emotional comfort it is identifiable in relatively few activities. Those identified by the nurses are: holding the patient's hand, stroking the forehead, squeezing the shoulder or arm, stroking the arm, and placing one's hand on the patient's chest. One informant stated:

N: . . . these are the nice things you're doing, the more soothing, comforting things and the intent is to care more emotionally for the patient . . . . they're comforting, nurturing, more tender type of movements and the intent normally is to, by touching, emotionally reassure the patient.

The body areas most frequently touched are the head, hand, shoulder, arm and foot. The trunk is touched less, perhaps because as one informant suggested, it is a more intimate body space. The nurses described these touches as positive and good, and as ones that made them feel good.

It was difficult for the informants to offer uniquely identifying features of the eight types of comforting touch. However, when they examined the taxonomy they described having an intuitive sense that it was "right" and stated they had performed all of these types of touches at one time or another, and they were indeed discrete touches, distinguished most clearly by the intent to communicate a specific emotion:

N: . . . when you said could you tell me . . . if I'm looking at you could I tell you, then I'd say I don't think so because half of it is what I'm saying, half of it is what I'm thinking I'm accomplishing by touching . . . So that I could distinguish between it if I was the one giving the touch but if somebody was looking at me . . . . they wouldn't necessarily distinguish between one intent and another.

Despite this generally shared belief among the informants it was possible in the analysis to achieve some discrimination between these touches. These are presented in the following sections.

Loving touch. This type of touch is highly personalized and intimate. Some informants were uncomfortable with the term loving, associating it with the love of family, mates or intimate friends, but when it was described as a deep caring for people the term was deemed appropriate. It is reserved for family, close friends, and those few patients that occasionally "get to the nurse," that is, for whom the nurse develops a deep sense of caring. To have a patient "get under your skin" (as the investigator described it to some informants) is not seen as a desirable event because of the extremely high energy drain on the nurse. In fact, it is to be avoided in order to survive. One informant, in discussing this touch, stated:

N: It is different because there's, like I say, there's that emotional bond. There's real feelings for the person, not just the caring of them as a patient--like the care of them as a person . . . I find though, a lot of times you only allow yourself to do that, in the area where we work, every once in awhile someone will get to you,

> and its *hard*. It's really hard because then you know it can really hurt . . . . it's not that you're not a caring person, it's almost as a means of survival . . . . It's almost like they become a part of the family, these certain people and to care for them, and also to be going through the emotional processes that you do while they're in the unit is really hard.

Loving touch would be expressed by those purely caring activities discussed earlier. Voice and affect would be highly emotive. One informant said, "It's not the actual laying of the hands [that would be different], it's what goes between the two of you." Loving touch also appears to be one in which the nurse enters the most personal body space of the patient:

> N: I find that when I have a patient that I'm really attached to, I often prop my elbow on the bed and as I'm talking to them, stroke their forehead and back into their hair you know, and that to me is a very, that's, especially with a 'tubed' patient, that's as close as you get to really relating to them 'cause you can really see their eyes. .

Warm touch. Informants described all of the caring touch as being "warm" (as opposed to cold) but agreed there was a separate warm touch. "It's something that you convey immediately by just skin to skin--the person knows immediately whether, what your intent is . . . . someone just rests their [themselves], if you put your hand on their arm or their forehead or whatever." One informant, when asked when the nurse uses a warm touch replied: "It's something that's spont-- like it's spontaneous, [something] that happens when you're talking." It seems to be a part of the nurse's make up. One informant suggested that it helped to convey to the patient that they could trust the nurse, as opposed to a cold touch. Of all the comforting touches this one seems most transferrable to the task touch. This is perhaps because the "warmth" is a more generalized caring feeling and not elicited by such specific situations as are some of the other touches.

'Being there' for the patient touch. This touch is characterized by a low or no verbal component. "Being there for the patient, for me, often [it] would be a holding hand type [of] thing, you know, no real movement involved, just sitting holding hands." It occurs most often when the patient is dying and the nurse sits with them so they do not die alone. In this respect, the nurse 'stands in' for the family. This touch does not necessarily require the same degree of emotional attachment that other touches described in this section require: "There's an expenditure of energy but it's not the same way, the attachment isn't really there

. . . it's just a matter . . . of human contact so that they don't have to be alone." It was described as a "quiet" touch, having to do with presence, perhaps best described by these informant's words: "It's a connection."

Compassionate touch. "Compassionate to me is understanding where they're at, being able to put myself in their place and touching them the way I think they would want to be touched at that time." It has to do with sharing and feeling, with being empathetic. It differs from sad touch in that it is less "event specific" (e.g., death) and is done for the *other*, whereas sad touch is done more for the *nurse* . "I think it's a sharing, feeling sort of a thing . . . it may not be because you can see the patient is sad and you're sad with them but maybe you're sad because of their situation." One informant said that this touch "mellows" everything else and this would be a "serious time". This touch, along with sad and consoling touch was frequently described as a "soft" touch.

Sad touch. Sad touch is perhaps the most recognizable of all the comforting touches. "If it was me and it was sad, you would know it . . . . I'd probably be crying . . . . or I'd be chewing on my lips so bad and my head is always down as I try to regain my composure." It is often associated with a patient who is going to die, has died and/or with their family. "Even when you get the body ready, you know, there's a certain feeling of sadness. . ." The nurse may sometimes feels as if she "has" to touch the patient because she is feeling so bad and wants to do something for the patient, especially if the family is there. With sad touch "it's over" as one informant stated, whereas with the compassionate touch you can still "do" something. One informant suggested that sad touch might be part of the letting go and preparing for the patient's death. "When that man died I was really hurt, I was really sad . . . . I just held his hand and tried hard not to cry."

Consoling touch. This touch is somewhat similar to compassionate touch but more similar to supportive touch. Consoling touch is more time limited than compassionate or supportive touch, in that the nurse consoles a patient through or immediately after an experience. "For the time you just try and make it better because you know that it will end."

The nurse consoles families, especially in their grief, by such activity as putting her arm around their shoulder. Nurses also console each other in a similar manner. The nurse would also use consoling touch with a child or a mentally retarded patient in an effort to "take away anxiety and pain," whereas with an adult, there is more responsibility incumbent upon them to get through it, and the nurse would likely use more of the supportive touch. It is also differentiated by the verbal component, which would be more "murmuring" than talking. The intent with consoling touch is to relieve discomfort (often emotional) during or immediately after an unpleasant or distressing event and is thus less proactive than compassionate and supportive touch.

Soothing/Calming. This type of touch appeared frequently in the interviews and seems to be one of the most regularly used touches and to be viewed as one of the most 'useful' by the nurses. There are three circumstances when this touch is used. The first of these is when the patient is agitated. "If they're really agitated, like you know you try and calm them, you're touching them more then." "A lot of times it maybe settles them and helps them to be more cooperative." "A lot of those people who pick and stuff if . . . you just talk really really simply . . . and just sort of you know, stroking their arm . . . they tend to stop being such a picker." The second circumstance when this touch is used is "to calm them down while the doctor's trying to do a procedure." For example, the nurse might hold the patient firmly over on his side during a lumbar puncture not only to position him, but to assist him with a sense of control. In these two circumstances, a firmer touch is used in order to help the patient to maintain or achieve control. The third circumstance is during the "working" touch of the nurse, all those activities that the nurse does in the course of a shift that have to do with basic nursing practice (e.g., bathing). In this case, it is to provide a general soothing/calming effect: " Obviously, bathing is also an active necessary procedural touch, but it's also . . . a time for settling, it's a time for calming a patient if you can."

Supportive touch. This touch is classified under both comforting and encouraging. The difference between supportive comforting and supportive encouraging is that of degree.

A supportive comforting touch would be "quieter" and less enthusiastic. It would also be more generalized in that it would not be as situation specific as the supportive encouraging touch. Supportive touch is described in more detail in the next section.

The sub-seggregate of comforting touch was the most difficult part of the taxonomy in Figure 1 (p. 35) for the informants to describe. Part of this is due to the lack of words in the English language with which to differentiate touches. Part of this was due, as well, to the highly emotional component of these touches and to the fact that so much of the differentiation resides in the nurse's intent of which only she can be cognizant. The fact that these nurses had never thought of touch so analytically, prior to participating in this study, was most likely a factor. Still, they were able to explicate for the investigator the nature and meaning of comforting touch to them. The words of one of the informants best capture the essence of what comforting touch is all about:

> N: They're all the caring types of touch that you do. And they're more things that when I think of them, they're not so medically generated, they're things like bathing the patient and rubbing the patient's back and rubbing their feet or just being there or just being a nurse. They're more of the behaviors that you think about when you think of nurses I think.

Encouraging Touch

Encouraging touch has a hopeful, future orientation as opposed to comforting touch which is more present oriented. Encouraging touch is also more situation specific,that is, an event often motivates its use. This kind of touch is more readily identifiable because the touch itself, as well as the verbal component, gestures and affect are more obvious in their meaning. These nurses enjoy this kind of touch because it is hopeful, often signalling clinical progress; it is playful and it most often occurs with a patient who is responsive. It also occurs among co-workers. There are four discrete types of encouraging touch: supportive, reassuring, spirit-raising, and fun/happy. With the latter two, the patient must be responsive because of the nature of the touch and the high verbal component. As one nurse said with a tongue in cheek tone to her voice, "How can you joke with your patient if he's not responsive? How are you doing today--ha, ha, ha?" Or, "That's right, your

patient's got the 'Q sign'--don't try being fun." As well as a high verbal component, spirit-raising and fun/happy touch are distinctly observable. They are generally lighter touches, and are characterized by playful hitting, or poking, or placing an arm around the shoulders, or giving affectionate hugs, and in some instances by back-slapping. In these cases the patient is doing well clinically and the touch is to celebrate this, or to bolster their spirits, and help them recognize they are making progress. With supportive and reassuring touch the patient may not be doing well. The patient is likely to be responsive, but if not, the support and reassurance may be transferred to the family and touch is used with them. One informant summarized the reasons that she uses this encouraging touch:

> N: When I think my patient's anxiety level is high, when I think his level of discomfort is high, when his feelings of frustration are high or when his feelings of success are high, then those are the times I think it's really important to reinforce or try and relieve stress, anxiety, hopelessness, or encourage with touch . . .

The four types of touch in this group are presented in more detail below.

Supportive touch. The nature of this type of touch is best captured by these words:

> N: Okay, when I think in terms of supportive, I think "Hi there, we're here because we're going to insert another chest tube and I'm just going to hold your hand now because I know that this is going to feel as miserable as sin, but we're going to give you lots of morphine and hopefully it's not going to be too bad," supporting them through something.

This touch has then, to do with "going through" experiences that are often unpleasant (e.g., the insertion of invasive catheters, enduring an endotracheal tube) with patients and providing them with moral support and encouragement as adjuncts to other support (e.g., analgesia). It differs from reassuring in that there is not the verbal reassurance that things are going to be "okay" or "get better." In fact, things may not be as hopeful when this touch is used. It differs from consoling in that there is not the attempt to assume responsibility for "taking away" the discomfort. This supportive encouraging touch is also used with co-workers when, for instance, they are having a particularly difficult shift. It might take the form of an arm around the shoulder with a little squeeze and a comment such as, "I know it's hard but you're doing good," or it might not include a verbal component.

To receive such a touch makes the nurse feel ". . . really good, better, relieved, appreciated" although several of the informants stated that such a show of support often will bring tears to their eyes and actually "hurt." This seems to be connected to a feeling of vulnerability:

> N: It's very easy to remain detached and aloof as long as you're not sure whether somebody else [cares] . . . you can maintain your facade of being functional, and then somebody gives you a hug and you have to concede that that caring is there and it's very hard to maintain your neutrality and your aloofness.

Maintaining this facade assists the nurse with staying in control of her emotions which the informants deemed necessary in order to function efficiently.

Reassuring touch. When the nurses spoke of reassuring touch they most often gave the example of the patient who was being weaned from the ventilator or progressing toward removal of the endotracheal tube: "'Look you know you're doing really good, you know you went on CPAP [continuous positive airway pressure] all day today and tomorrow it looks like we're going to be able to take the tube out', to me that's reassuring." "I find I get more involved with touching, like squeezing their hand for reassurance or something like that, [with] the person who's awake, a person who needs reassurance like when they're going to be extubated or if some big procedure is going to be . . ." It is a firmer touch than the other touches in this category. Reassuring touch is not categorically associated with a hopeful outcome. For instance nurses reassure the patient with touch if they "just received bad news like their leg is ischemic and it's got to come off . . . I usually immediately suspect that they need more reassurance and I would try touching them a little more frequently."

Spirit-raising touch. Spirit-raising touch is similar in expression to fun/happy touch and was often discussed together with fun/happy touch. The difference is in the intent and verbal component. The intent is to raise the patient's spirits and this is reflected in the verbal component. In the group interview, two of the informants said, "Encouraging a patient to wean you do a lot of that spirit-raising," and "They may be just *blah* and you're saying come on, you can do it, we know you can do it!" As well, it can be a touch of celebration. For example, the case of the patient who has just been successfully weaned

from the ventilator or is being discharged from the ICU and the nurse might squeeze their arm or give them an "I knew you could do it" hug. This touch is also used with co-workers, taking the form sometimes of back-slapping or hugging. Its intent, in these situations, is the same as with patients--to raise the nurse's spirits. There is a decided element of boisterous fun in this case.

Fun/happy touch. Certain activities can be fun touch, such as shaving a patient: "It's fun to shave them 'cause you can make lots of jokes, you get that eye to eye contact if they're responding." This touch is playful and:

> N: . . . the sort of teasing touch that you sometimes get . . . like the little old guy that's quite happy to have all the attention of all the nurses looking after him and he's making little jokes with you and you're making little jokes with him and you might nudge him on the shoulder as you say something to him in fun or in jest.

It is significant to note that although the nurses found these encouraging touches easier to describe than the comforting ones and could give clearer descriptions, they do not make up the majority of touches in the ICU. Perhaps they stood out more clearly because there is a decided element of reciprocity with them, something all the informants described as being very important. Most of these encouraging touches are in addition, "fun" and there is not a great deal that is "fun" in an ICU, nor many patients able to respond to this sort of interaction.

Touch to communicate caring was described by the nurses as a unique and special kind of touch. The complexity of touch as a concept and its humanizing potential in a technologically demanding environment is reflected in their words, for example:

> N: He was waiting for Herrington rods so there wasn't a lot that we can [sic] do . . . so we did a lot of talking together and so it was me standing at the head of the bed and we're just, like I'm constantly . . . kind of grabbing me and hitting me on the arm--not hitting you know, touching me on the arm and we're just having just a great time and there was a lot of touching and at the very end of the shift he took my hand. Twenty-year-old guy, I just couldn't believe it--like it was just wonderful, twenty-year-old guy, you know--he wished me all the luck in the world . . . and it was just wonderful, he gave everything, he helped me out more than I helped him out and we also had a sad time of talking you know.
>
> R: Did you touch then too?
>
> N: Yeah.

R: What made it real good do you think with him, was there one thing that you could pick out that--

N: Maybe he appreciated his touches.

R: So you felt like there was some give and take?

N: Oh, there was *so* much.

Touch to Protect (Protective Touch)

Touch to protect, a seggregate of the taxonomy kinds of touch, refers to protection of patient and/or nurse. This touch is used most often with patients whose behavior is problematic for the nurse. In the ICU, when the nurse loses control over patient behavior it becomes problematic. The necessity of control over the patient and situation was emphasized time and time again as the informants talked about "getting control" or made statements such as: "You don't have the control over somebody you can't reason with . . ." and ". . . it's very scarey when you realize that you're starting to [lose control] . . ." Loss of control over a patient's behavior threatens the patient's physical safety. Informants, when asked why they used this touch, replied in part:

N: . . . worry that the patient really is going to harm himself, do something you know, really dangerous.

N: . . . in order to protect your patient from his own destructiveness. . . . you're trying to protect that patient. . .

N: You have to do the controlling things sometimes for the patient's own safety.

Examples of protecting patients from themselves would be: preventing a self-extubation, preventing the patient from pulling out a vital catheter, such as an arterial or central catheter, or preventing the patient from crawling out of bed. The last is important because, in addition to dislodging catheters, the patient may fall and be injured.

Loss of control over a patient's behavior also threatens the nurse's safety:

N: These are sort of things [protective touch] you're forced into for the patient's safety mostly . . . your own safety as well, or the safety of any individuals around.

N: Our big thing in order to justify what we do is the safety of the patient but most of us are pretty tiny women and I think my safety comes into it a lot too.

As well, loss of control over the patient's behavior threatens the nurse in a more complex emotional sense. The use of touch to protect the nurse emotionally involves a combination of interactions between the nurse as a person, as a professional, and her reactions to the stresses of the ICU to which she is exposed.

It seems that the emotional protection of the nurse through touch has a two-fold mechanism of motivation. The first has to do with the need to distance oneself from emotional pain and is tied into the energy reserves of the nurse. It occasionally happens to all nurses and frequently happens to "burned out" nurses (in large part because of the need for adequate energy reserves). Sometimes, nurses cannot tolerate further suffering and need to generate distance between themselves and the source of the suffering, in this instance, the patient. This exchange during the group interview best illustrates this point:

N1: I think there's two types of cold touch. One cold touch comes from a cold nurse for whatever reason, whether she's burned out, tired, "pissed off," or whatever. Then there's the cold touch, that you're cold, in spite of what you're feeling inside. You relate so much but you can't warm up . . .

R: It's a protection so they don't get under your skin?

N1: Yeah--it's a tug of war inside you.

N2: And more uncomfortable on your part.

N1: That's right.

N3: Like you know you have to do it but you really don't want to.

During another interview an informant made this statement:

N: They end up dying and you can go on kidding yourself death after death kind of thing but there's one person that'll get you and you may not even have worked with them for long or whatever. That's happened to me too.

The second mechanism through which the emotional protection of nurse seems to operate is connected to a release of tension. Unless the nurse has been able to use other strategies to deal with the frustration that some combinations of variables produce, she reaches a point where she has no option but to touch in what these nurses often described as "a negative way." The failure to successfully use other strategies (e.g., reasoning with the patient, searching for and correcting the source of confused or agitated behavior, using a

calm, soothing approach, or obtaining relief by withdrawing from the bedside) or the failure of these strategies, may result in the nurse reaching a point described as "being at the end of your rope." Reaching the end of your rope is another complex process, that is, each nurse is unique in how much she "can take" on any given day, in any given situation, with any given patient. When a nurse is at the end of her rope she is experiencing high frustration (emotional tension):

N: Sometimes you just, you know, you want to scream like, oh you know, you have someone who was constantly picking and picking and picking and picking . . .

N: After a while your frustration level is to the point regardless [of] whether they understand or not, you've just had enough.

She must release this tension. If other strategies are not successful or are not used, the nurse has a repetoire of "drastic measures" that she will use. The more experienced she is the more rapidly she will employ them. Drastic measures are restraining and sedating patients, and these measures bring emotional relief to the nurse by enabling her to achieve control of the patient's behavior. However, prior to employing drastic measures and particularly during the use of restraining touch, the nurse may use a touch that is protective; touch that conveys a negative feeling to the patient and that leaves the nurse feeling "bad." This bad feeling is so strong that the nurse may be unaware of the emotional relief that she experiences as a result of touching in this manner.

The nurses' feelings of "bad" when this protective touch is used was also described as "angry," "guilty," "lousy," and "duped." When asked why it elicited these feelings nurses responded with several reasons:

N: Because I don't like to touch patients that way . . . it usually means I've lost control of the situation and I feel that [the] other person has the control, and in fact I've just given it to them by proceeding to act like this. I feel bad because I know I've given away my control.

N: It is contrary to human nature.

N: I guess because I feel it's wrong to treat a person that way.

N: As soon as you recognize that you're doing that, you start getting on such a major guilt trip.

> N: They're very bad feelings. And it goes against everything that you're told you're supposed to be and do and you don't feel that you're living up to the "Nancy Nurse" kind of [image] . . .

Although an observer might judge the use of one of the types of protective touch in Figure 1 (p. 35) as being unnecessary, analysis of these data revealed that (with one exception) the touch was necessary within the private reality of the individual nurse. Describing these instances one informant stated:

> N: I think they're all negative things but they're all judgement calls. Sometimes you have to be forceful with the patient if they're going to harm themself by crawling out of bed and fall on their head . . . . sometimes you can look over and see a nurse fairly forceful with her patient and you think, "good grief"! What the hell is she doing? However, if you were in that situation, you'd probably be doing exactly the same thing . . . what you may think is aggressive may be exactly the amount of sort of tension the nurse needs to put on the patient.

The exception to the necessity of this touch is the nurse who does not care about people, who is motivated out of, as one informant put it ,"meanness." Those situations of the unnecesary use of these touches, in particular commanding through cold (see Figure 1, p. 35) by nurses who are motivated by "meanness" appear to be infrequent and not representative of the majority of ICU nurses: "There are girls who are very, very mean to people, it's not a lot [of nurses] but there definitely are people . . ."

The use, by all of the informants, of the term negative to describe these protective touches arose from three sources. First, all of these touches can and usually do convey a negative feeling to the patient, either physically and/or emotionally and in some instances, the intent of the nurse is to convey a negative feeling, e.g., punishment:

> N: I have seen those used in another instance, in the sense where say, as an example, you get an [patient who has taken an] overdose in. You want to make their experience [in ICU] as unpleasant as possible so they won't do it [overdose] again. And we have done that. . . hoping to God that it would make them realize that this [taking an overdose] is not a fun thing to do and a way to get their attention or whatever.

Second, all of the informants, as previously described, said that to use these touches made them, in most instances, feel "bad," although this was less so when the touch was used to *physically* protect the patient or the nurse herself. Third, this kind of touch does not have an element of reciprocity and the patient does not give back to the nurse or worse, reacts to

the touch with more of the problematic behavior, reinforcing the message that this is not a "good" or positive touch.

This protective touch is the antithesis of caring touch. As one informant stated: "And that's the kind of touch that you would . . . see in relationship to patients when they are being touched more as a piece of technology than as a person, and its--its a touch without feeling." Caring touch and protective touch were described as being "on the different ends of the continuum" and as mutually exclusive: "No you can't [use them simultaneously] they're two opposite things, they're totally different conveyances of meaning." However, as with caring touch, protective touch can be used to "flavor" the task touch.

The informants had difficulty discussing this touch for a number of reasons: they did not consider it "real touch," some of them were reluctant to acknowledge its existence, and some were hesitant that the investigator would judge them as "bad" nurses. Some of the informants discussed it only after the investigator acknowledged that she had seen and used those touches in her own critical care practice. All of the informants discussed it more readily as the investigator-informant relationship developed. Although all of the informants describe protective touch as negative and had some difficulty discussing it, they were adamant in their defense of its necessity:

> N: If you bring any group of people in off the street and put them in the same situation for any length of time they're going to come out looking very similar to the rest of us you know.

This seems to be related to the difficulty and reluctance to discuss the protective touch. The informants were acutely aware of not wanting to be judged by "outsiders" in a derogatory manner because of a lack of understanding on the part of an outsider, who was not privy to the experienced realities of day to day work in the ICU. As well, all of the informants reported having been taught in nursing school to be understanding and empathetic of patient behaviors, and having not been taught how to deal realistically with the many patient behaviors and working conditions that would strain anyone's limits of patience, tolerance, and energy:

N: It's something that's ingrained in you that's just *not done* and a good nurse doesn't do things like that; but we are human.

The reasons that protective touch are used are complex, in particular, when it is emotional protection of the nurse. The variables that interact arise from the nurse herself, the environment, and from the patient. Each of these is discussed in detail in the section *Patterns of Touch*. However, these words from one of the informants in the first round of interviews reflect the complexity and interactive nature of some of these variables:

N: I don't think it's a therapeutic tool at all. It's a form of touch that I see and it happens in situations usually when the nurse herself is overstressed and there's too much input to be processing and there's a lot of instability in the patient and a lot of technical things going on. Something has to be done in a hurry and when the hands go on they're not as gentle as they could be, they're in a hurry, they're not conveying the same kind of concern that they would if they, if you were touching somebody and remembering all the time in the back of your head how you would want to be touched. I guess that's the way I would describe it--it's a negative thing.

Sub-seggregates

Touch to protect has two sub-seggregates, controlling and distancing. They differ substantially in three ways. First, controlling touch overlaps considerably with touch to accomplish a task as there are a large group of tasks where control of the patient is mandatory. Second, distancing touch is predominately used to protect the nurse and the emotional sub-set of distancing touch is exclusively used to protect the nurse whereas controlling touch is used primarily to protect the patient. Third, the distancing touch was generally perceived as being much more negative by the nurses than the controlling touch. These two sub-seggregates of protective touch are more easily identifiable than the caring touch because all of the identifying criteria (context, posture, affect, and voice) as well as the skin to skin contact are clearer. For the same reasons, it is easier to differentiate between the more discrete sub-types of protective touch. The feature that demarcates controlling and distancing touch is that distancing touch is frequently a "non-touch," in that it is a withholding of touch. Although this appears to be a contradiction of terms, it is consistent with the concept of a gestalt of touch and with the informants conceptualization of touch. The types of touch that are classified under controlling and distancing touch (see

Figure 1, p. 35) do not fit exclusively within the sub-seggregates under which they are listed. In particular, the types classified as controlling can be used to distance. The types of touch can also be used in combination. As with caring touch, the types of protective touch classified as controlling and distancing can be, and often are used to "flavor" the task touch, especially procedures. This "flavoring" is more dominant with the protective touch than with the caring touch because of the unpleasant nature of many of the tasks and procedures in an ICU.

Controlling Touch

Controlling touch is used primarily to protect the patient from harm. During card sorts, one informant sorted the task and protective touches together when asked to create two, rather than three kinds of touch:

> N: I'm going to call this [sort of cards] the controlling pile . . . . you're the one that's in control and you have to do things that maybe you don't even like doing but you still have to do them . . . . normally I think of controlling as negative, like most of us think of controlling as more of a negative thing. You like to think that you have a give and take relationship with your patient but sometimes it's just not a reality. I'm going to use controlling as a neutral word . . .

After this nurse had completed the card sort and combined her 'task' and 'negative' piles, she stated:

> . . . controlling is also positive, because as a nurse you do have to take control of the patient's environment lots of times especially when they're obtunded or whatever. I mean, you're controlling everything--I mean even their breathing.

There are elements of protecting the nurse's own job security and of setting limits on the patient in order to preserve the efficiency of the nurse's functioning, as is reflected in this excerpt from the group interview (when the informants were asked if controlling was concerned with protecting the patient):

> N1: You're protecting your own job too.
>
> N2: At the risk of exposing myself in front of my peers--sometimes you're really just ticked off at somebody because they just seem to deliberately be sabotaging everything you're trying to do for them.
>
> N1: And sometimes it's just not so much to protect the patient but, almost to discipline them, like you know, this is how you are going to act--if you're going to be in this bed and you want me to look after you, this is what you're going to

do. Then you're going to get better and you're going to get out of here.

N1: Also, controlling all those things you do too, to save your job. Your first job in ICU is to maintain the patient's safety. And if you don't do a lot of those behaviors that patient will not be safe and your job could be . . .

Analysis of the data on controlling touch resulted in the identification of eight discrete sub-types of touch (see Figure 1, p. 35) ranging from the less emotive "firm/calming" to the more emotive "harsh/severe." Each of these is described in the sections that follow. The general characteristics of these nine controlling touches are that they are done: without [caring] feeling, in a cursory manner, hurriedly, using a jabbing or poking skin to skin contact, with a strong grip, gruffly, and with force (e.g., pushing). As well, they are characterized by very different verbal components than the caring touches, more distance between the nurse and patient, and different nurse affect and posture. Regarding this touch one informant stated, "That's where you're touching the patient but you're not touching . . . you're touching without feeling." This is consistent with the view held by many of the informants that only caring touch was "real touch."

Firm/calming touch: This type of touch was the least likely controlling touch to be described as negative. It is similar to the caring touch, soothing/calming in that it is used when a patient is agitated or during a procedure in order to produce a calming effect. It differs in two respects from soothing/calming. First, its motivation is not necesssarily rooted in caring, but in a need to achieve control in a given situation. So, although both types of touch are characterized by firmness, the firm/calming is control oriented. Second, this touch would not be used during such tasks as bathing, as would soothing/calming. It would more likely be used during a technical procedure, such as a urinary catheterization, to control the patient's mobility in order to facilitate insertion of the catheter. It would not necessarily be an unkind touch and could be combined with soothing/calming. It is also used to help the patient regain control:

N: We're touching them to help them regain control--yeah, that's what you're trying to be, you're trying to settle them and relax them. You're trying to control them so that they can be controlled and helped.

N: Well, there's times when you're putting lines in, or procedures, that you've got to

> hold the patient down . . . if the patient is really confused or combative or very scared they might tend to jerk away an awful lot more and you might have to hold them down more firmly.

Both the firm/calming and the aggressive touch are classified under both working and controlling because of their frequent association with the performance of tasks.

Aggressive touch. The informants made it clear in the group interview that there was a positive aggressive and a negative aggressive type of touch. The negative aggressive type of touch has two components. One is the patient's experience of a negative feeling and the other is the nurse's intent to communicate a negative feeling. It is most often associated with tasks or procedures that have to be done for the patient's safety or "own good." For example, a positive aggressive touch would be aggressive chest physio to prevent intubation (perhaps administered as often as every hour). The patient would likely interpret this as a negative experience, but to the nurse it is positive because it was necessary for the patient's recovery. "Or someone who doesn't want their NG [nasogastric] tube back down and you've got to get it down . . . and it's got to go." Or,

> N: When I say aggressive, I mean like you've got a "wimp wagon" lying in the bed and you jerk him out and into a chair whether he likes it or not. You are aggressive because lots of times they can say no and be very resistant. [So why do you do that?] It's good for him to sit up in that chair, [to] get moving and get mobilized.

Aggressive touch also has an element of "no choice" for the patient:

> N: It's a touch that, or an action done *to* the patient regardless of what he thinks about it . . it's something that we do, it has to be done and it's done and the patient and his feelings and everything else are irrelevant . . . . they have no say whatsoever.

Scolding touch. Scolding touch has a high verbal component and, as well, high gesture and affect components. It would be recognizable by statements such as: "Don't you pull your tube out," or "You promised you wouldn't pull your tubes out" in combination with a finger shaking, a tapping or poking skin contact, or perhaps a light hand slap or shoulder shake and a checking for the secureness of restraints. It is very similar to the touch one would use to scold a child.

Commanding touch. This touch is similar to scolding touch but differs in degree,that is, it is more controlling. The tone of voice and body gestures are different as well. The

verbal component might be an order: "Don't you touch that tube!" or "Sit back in bed!" The skin to skin contact would be firmer and more restraining. Its use may depend on the type of day the nurse has had with her patient and the amount of patience she has left. For instance:

> N: And it sometimes depends on the patient, like a wimp wagon, I tend to be more scolding, with someone who's deliberately done the opposite I've done all day, I tend to command them, I don't waste my time scolding them.

Another informant stated, "I guess it [controlling touch] would just be that last final warning and the last."

Restraining touch. Restraining touch is frequently used in the ICU and it ranges on a continuum from touching a patient's arm and reminding them that they must be careful not to accidently dislodge some tube or catheter to the use of leather restraints. As with all of these controlling touches it is frequently not used alone, rather it is used in combination with another of the controlling touches such as firm/calming or forceful depending on the nurse, the patient and the circumstance. Its frequent use is dictated by the nature of the ICU environment where the patient's survival often depends on the preservation of the integrity of invasive catheters and the relative immobility of the patient to permit ventilation or the insertion of catheters and tubes.

> N: You're restraining them because they are confused so they won't fall out of bed. Or they won't pull their tubes out when they need it.

The informants stated that restraining touch often had a positive component because of the protection it gave the patient. However, when restraining touch is used in frustration, because other nursing measures have not been successful, or when it is used in haste or impatience its connotation is more negative.

> N: See restraining often has . . . a positive component. When a doc is trying to do an LP [lumbar puncture] and the person's kicking all over the bed, you restrain them so you can save them from being paralyzed.

Forceful touch. This touch is less dependent of specific tasks and overlaps with restraining touch, that is, one can use a forceful touch to restrain, the difference being (when the group was asked to differentiate between forceful and restraining touch): "You

can be forceful without stopping them from doing something." More pressure is used with forceful touch than with the touches previously discussed and the posture of the nurse is more determined and active. This type of touch is more likely to be used when the nurse is frustrated, especially if the patient is difficult to control. It has more of a negative connotation than those touches discussed thus far and differs from commanding in that, "With commanding they still have an option to participate, with forceful it's more done to them."

Rough touch. A rough touch is often situational, and used for the purpose of protecting the patient:

> N: If you're halfway in the room and you see the patient in the midst of pulling out his art [arterial] line, you tend to be very rough without even thinking of it, you grab his hand and you get it out of there.

A rough touch was described as less deliberate than a harsh/severe touch and as having more of a patient benefit component: "Sometimes you have to be rough for the patient's own good." One of the most frequent occurences of rough touch is during the turn, whether because of the actual difficulty of the turn, for instance an obese patient, or because the nurse is frustrated. The frequency of its use during turns is probably a reflection of turning being a frequent ICU activity. Similarily, the nurse can use a rough touch during an activity such as bathing the patient. In this instance, her strokes would be cursory, hurried and done with greater pressure.

Harsh/severe touch. This touch is listed under both controlling and distancing because of the substantial nurse protection inherent in it. It will be discussed entirely in this section. Harsh/severe touch is similar to rough touch in its patient protection components. It was differentiated from rough in intent:

> N: I see harsh as having a deliberate component to it, like when you are harsh with a patient because you wanted to be harsh, whereas I see being rough . . . like grabbing a patient and probably breaking his wrist before he extubates himself. . .

Harsh/severe touch, then, is more deliberate and more likely to be used to punish. The nurse who uses this touch is more likely to be extremely frustrated or angry with the

patient's behavior. It is also more likely to occur when the nurse is more predisposed to frustration (e.g., being tired) and when situational and patient variables combine with such nurse variables to create the state of "being at the end of your rope." It is this frustration that results in this touch having both controlling and distancing components. As well, this touch is more likely to be used by those few nurses who "do not care." Its use enables the nurse to create and sustain an emotional distance consistent with an absence of caring emotion. It was perceived by the nurses as one of the most negative of all touches in both its communication to the patient and the resultant "bad" feeling the nurse has after using it. It is likely a precursor to abusive touch, something that the informants only alluded to in the interviews. The nurse at greatest risk of using this touch seems to be the nurse who is experiencing severe "burn out."

The sub-seggregate of controlling touch is an elaborate one and tied closely to touch to accomplish a task. Many of the tasks in an ICU mandate that the nurse achieve control over the patient's mobility and behavior because of the critical safety issues. The use of these touches is therefore high, and higher still, when the frustration component is added.

Distancing Touch

Distancing touch is used to create physical and/or emotional distance from the patient. The creation of physical distance is accomplished by creating a barrier between the patient and the nurse during touch, or by actually moving away from the patient. Physical distance is created either to protect the nurse from catching something from the patient or it can be a way to help create emotional distance: "It means something like pulling away, dissolving a relationship." Although it was usually viewed by these nurses as being negative, distancing touch does have positive components:

> N: Distancing is, I must separate myself from you . . . . to gain my composure, to gain my own space . . . . distancing can be good because if I need to be able to gain my composure in a certain situation . . . I'm going to push them away . . . that's separating myself from the situation.

The creation of emotional distance can protect the nurse from using an abusive touch, disengage her from emotional pain, or conserve energy reserves. It is sometimes used

when there is an unwillingness to expend energy, for example on a patient that the nurse does not like or on a patient who is not considered salvagable; or it can be an established pattern of behavior for the "technical" or "mechanical" nurse who will be discussed in the section, *Patterns of Touch*.

Distancing touch is composed of four discrete sub-types: harsh/severe, barrier, withholding and cold (see Figure 1, p. 35). With the exception of harsh/severe, discussed above, these types of touch differ radically from all other touches. There are no general characteristics common to all of these touches. Each is discussed below.

Barrier touch. This touch is done with some sort of barrier between the patient and the nurse. Most often this barrier is gloves, but informants described the "yellow gown barrier" and the "mask barrier" as well. Barrier touch is unique among the types of touch in the taxonomy in three respects. First, it is the only touch mediated by a deliberate skin covering. Second, its placement in the taxonomy does not reflect the degree of emotiveness, that is barrier touch is not necessarily more or less emotive than those touches on either side of it. Third, it is the only touch so highly associated with the physical protection of the nurse. In fact, the protective element for the nurse is so important that it can be described as life saving.

Nurses touch patients with gloves on to: 1) protect the patient from infection (e.g., during dressing changes or insertion of invasive catheters), 2) protect other patients from cross infection, and 3) protect themselves from diagnosed disease (e.g., hepatitis, AIDS, herpes), unknown organisms (e.g., when handling body secretions), or excrement (e.g., urine, feces). The frequency with which the nurse must handle secretions in an ICU accounts for the high frequency of barrier touch. As well, all of the informants identified a heightened awareness of the need to protect themselves in light of the rapid advance of AIDS, and an increased need to use gloves. For these nurses, the possibility of acquiring a fatal disease is a legitimate and constant fear. They identified three groups of nurses on the basis of the amount of time they wore gloves: a very small group who probably don't wear

gloves enough, a very small group who are "paranoid," having let their fear get away on them and consequently wear gloves for everything, and the majority of ICU nurses who use common sense in determining when gloves are indicated. All of the informants said that they preferred not to wear gloves unless they had to. They gave such reasons as: "gloves are sort of another barrier, it's the same as sitting farther away . . . or not touching," "you can't feel your touch as well . . . . it doesn't feel the same to the patient and it's not as good," "you haven't got the skin to skin contact," "I cannot make a bed for example," "It doesn't feel as close . . . as genuine," "it isn't the same kind of warmth . . . plus you know my feeling in my fingers isn't as acute," "I don't feel natural with the plastic . . . it's not as easy to stroke," and "they're a pain." The main dislike for gloves centers around the poor "feel" that the nurse has in her fingers and hands. Informants also identified that they thought that it probably wouldn't feel as good for the patient and it would be more difficult to communicate caring through touch with gloves on. As with many other areas in this study, when asked what touch was affected by gloves they replied the caring touch. They also identified that the inappropriate use of gloves (when they weren't necessary) could communicate negative things to the patient and make him feel "like a leper."

Withholding of Touch. This touch, although it appears to be not touching, was clearly identified by the informants as a type of touch. Again, this is consistent with conceptualizing touch as a gestalt. The withholding of touch is characterized by the absence of touch contact, specifically the caring touch: "It's [withdrawing] those positive ones, positive touches." The only touch that remains is the task touch which is necessary to execute one's daily work. One informant described it this way:

> N: . . . as a means of distancing myself. I personally would use more of a withdrawal, total withdrawal of like, the contact type of touching.

It does not have the negative connotations that cold touch does and in fact, ". . . sometimes you can have a very good reason for withdrawing." It can also ". . . be done without an intent of anything but a cold touch has a definite component to it, you know the message, but withdrawing a touch, you don't know . . ." Withdrawing touch can be used to punish a

patient by depriving them of an element of caring:

R: So a punishment touch would be more of a withholding than an actual touch?

N: Withholding, yeah I think that's pretty true. And it's quite effective.

When this happens it is part of a more generalized withdrawal of emotional investment or reflects an unwillingness to make an emotional investment. For instance, a nurse might withdraw or separate, and withhold her touch from a patient whose demise was inevitable in order to minimize the emotional pain she might experience. The nurse might also withdraw her touch in order to avoid using a rough or a harsh/severe touch. The distance she creates by doing this again, serves a protective purpose.

Cold Touch. Cold touch is one of the most complex types of touch. In the group interview, informants agreed that it should be placed at the far side of the taxonomy because it was the "worst" touch. It is an "a/emotional" type of touch:

N: For me it would be somebody who comes in as an organ donor or something like that . . . you feel very sad about the situation but there's not going to be any emotional investment in the person because there is nothing to . . . it's not cold in the sense that it would be a cold touch that you can convey to somebody that is alive, but it's in the sense that it's "a/emotional."

In this respect, cold touch serves a highly protective function for the nurse; it is a way not to care when caring is futile. Alternatively, cold touch can be used to convey a deliberate negative feeling of uncaring: "If you're cold you just don't care," and

N: They may just not like the person. I don't know. They may not want to develop any type of emotional relationship, and so they make it known right from the start that there won't be one.

A "cold" touch can consist of any amount and kind of skin to skin contact. When asked if there were specific characteristics, one informant replied:

N: Not necessarily 'cause sometimes like, you can feel the--you can just *feel* the ice going through you and it can be a long touch or it could be anything . . . . it's not just the touch, but it's more of the person the way they are, they talk, they look, facial expression, distance you keep away from the person. It all together tells the person.

A cold touch then, is the least humanizing of all the touches that these nurses described. When this touch is used, the nurse does *not* want to see the patient as a person, or to in any

way humanize them. That would mandate some sort of relationship in which the nurse would then be susceptible to emotional connection and energy expenditure. Rather, this is a touch to generate emotional distance between the nurse and the patient.

The sub-seggregate, distancing touch was one of the most difficult to elicit, in particular the emotional sub-set of withholding and cold. This may have been due to: 1) the difficulty informants had describing touches so substantially defined by "other than" skin to skin contact (e.g., by affect), 2) the difficulty in discussing types of touch that these nurses believed were contrary to what a "good" nurse "ought" to do, particularly those touches that may be precursors to violence or dehumanize the patient, and 3) the polarization between caring and distancing touch and the resultant difficulty in coming to terms with their own potential to use both kinds of touch.

Touch to protect the nurse and/or patient was described by these nurses as necessary. Although there are positive components, generally speaking they described it as a negative touch. Whereas, caring touch is unique in its humanizing potential, protective touch frequently fulfills its purpose by virtue of its potential to dehumanize. As a result, the nurse must continually manage the cognitive dissonance generated by the co-existence of "good" and "bad" as it applies to the concept of touch. This conflict was evident in the struggle that these nurses had in articulating these two kinds of touch.

The third kind of touch, task touch (which is discussed in the following section) affords the nurse an opportunity to choose a balance between caring and protective touch that minimizes the conflict discussed above. The nature of the ICU is such that task touch dominates, both in the amount of time the nurse must spend attending to it, and in the priority that she must assign it. It is, therefore, the touch the nurse will spend most of her time doing.

Touch to Accomplish a Task (Task Touch)

Touch to accomplish a task, although it appears in Figure 1 (p. 35) to be a small seggregate, in fact constitutes the majority of touch done by ICU nurses. The intent in

doing this kind of touch is to carry out the functions of the job namely, intensive care nursing. The activities subsumed under task touch define, for many, the practice of intensive care nursing and many nurses are measured against criteria composed largely of these activities. These activities are mandated by: 1) the standards of the speciality of critical care nursing, 2) the standards and expectations of the agency, and 3) the expectations of physicians. In the respect of being mandated by others, task touch differs radically from caring and protective touch. In the latter two, especially caring touch, the nurse can choose whether or not to use touch as a specific nursing strategy. As well, these two kinds of touch are highly emotive, whereas task touch is, in many ways, a dispassionate touch. The demarking feature that makes task touch perhaps the most important one, relative to the patient's experience in the ICU, is that the nurse *has control over how* she will execute it. She may choose to touch in: 1) a caring way, 2) a controlling or distancing way, or 3) a dispassionate way. The investigator chose to represent this unique characteristic of task touch with the term "flavoring." These statements illustrate this concept:

> N: The other types of touch that I've already talked about can be used in conjunction with that procedure to make it less stressful or to convey a feeling of understanding for the fear or discomfort or whatever's involved for the patient.
>
> N: Even when I'm doing a procedure I try and make the touch as therapeutic as possible.

The nurse can then, alter the patient's experience of even an inherently painful task by how she chooses to touch.

Activities

Before proceeding with a description of the sub-seggregates, and in particular, the types of touch under working, it is necesary to explain the nature of the activities that constitute the work of the ICU nurse in order to clarify *what* the nurse is doing when she is touching to accomplish a task. The informants sorted these activities into three broad categories: procedural or technical, maintenance and assessment.

Procedural or technical activities are either nursing or medically generated. In the ICU

a substantial number of procedures are medical or medically generated. Medical procedures centre mostly around the insertion of invasive catheters (e.g., hemodialysis lines, pulmonary artery lines, arterial lines, endotracheal tubes, gastric lavage tubes). In these procedures, the nurse assists the physician to carry out *his or her* job--her focus is on facilitating the procedure (i.e., on the physician). Medically generated procedures are often nursing procedures done as "doctors orders." They include such things as administration of drugs, treatments, insertion of catheters, and so forth. Nursing procedures include such activities as insertion of IV catheters, insertion of urinary catheters, dressing changes, chest treatments, changing endotracheal tube ties, instilling and suctioning airways. In these situations the nurse's primary interaction is with the patient, that is, her attention is focused on the patient, the activity, or both. The touch used with procedures differs from the other two groups of activities somewhat in that it is more consisently a "cut and dried" and a "poking and jabbing" touch. More touching with the finger tips is used with this and with assessment touch.

Assessment activities are sometimes dictated by physicians (especially regarding frequency), but are more often regulated by nursing or unit protocol and patient condition. They include such activities as general systems assessments, vital sign monitoring (both invasively and non-invasively), palpation, and auscultation. One informant's words summarize well the activity of assessment:

> N: . . . you look in their eyes, and we do a systems assessment, we go CNS, CVS, GI, GU, and so I . . . work my way from head to toe, looking in their eyes and trying to get a response from them--'can you squeeze my hand?'. . . and if they can, 'wiggle your toes'. Then you take their temperature, blood pressure. Normally I do my numbers first and then I go through and look at the body and looking at a dressing, touching to feel pulses, listening for bowel sounds. A lot of . . . the touch is involved with your stethoscope.

Maintenance activities constitute the largest and most purely nursing category. They have to do with prevention of the complications of immobility and ICU treatment (e.g., artificial airways), and hygiene and physical comfort. Included are: range of motion, turning and positioning, chest physio, instilling and suctioning, eye, mouth and skin care,

cleaning incontinence, peri-care, bathing, back rubs, foot massage, hair washing, shaving, cutting nails, and so forth. There is a hierarchy within this large category in that if a decision has to be made as to which activities are to be completed the preventive activities are completed first, basic hygiene (bathing) next and physical comfort or hygiene activities (the "extras" such as cutting nails, washing hair, shaving a female patient's legs, foot massage) last. As well, there are some nurses who attend only to those things that are mandated by unit routine and some who attend, or try, to all of them. The nurse who attends, or tries, to all of these things was generally described as the more caring nurse who is likely to use more of the caring touch. The most significant activity in this group was the bath. For most of the informants, it was described as a special or "therapeutic" time with the patient. This informant's words demonstrate how the bath is used by some:

> N: I'll do, you know, each finger and I suppose do it like I'm caressing their hand, that kind of thing. I don't really wash briskly or I don't use a brisk motion when I wash a patient . . . just long stroking movements with a patient, same with their toes you know, in all their toes and stuff . . .

It is important to note that these activities consume the vast majority of the ICU nurse's time--they *are* what she does, her work. Often there is little time or energy left to spend doing non-physical nursing, whether it be with families or patients. However, because the task touch can be "flavored" so readily, the ICU nurse is able, if she chooses, to use these activities as strategies in the nursing of the patient.

The Sub-seggregates

The sub-seggregates under task touch are working and controlling. Controlling, already discussed overlaps with both task and protective touch because many of the tasks are controlling by their nature and/or require that a controlling touch be used in conjunction with a task touch.

Working Touch

Working touch, the predominant sub-seggregate, refers to the touch used to accomplish the "work" of the ICU nurse. It is, therefore, a broad term that includes all of the procedural (nursing and medical), maintenance and assessment activities that are

performed in an ICU. It was frequently referred to as a "technical" touch. This work is "done to," in most instances, ICU patients. The dependent state of the ICU patient accounts for most things being "done to" rather than with them. This touch is a "have to" touch and was described by informants as necessary, where necessary connotes work that is mandated and regulated by the patient's condition, nursing protocol, and physician expectations. If this work is not done, patients do not survive and nurses do not stay employed. The work is physical in nature. It is done to and for the patient's physical self and is therefore highly measurable. The informants described this touch as "touch with a purpose." Although all touch was described as purposeful, the connotation of this touch is somewhat different in that there is a measureable goal to be achieved that has been demonstrated to contribute to the patient's "cure." The goals of caring and protective touch are less clear, less proven and less measurable. They are, consequently, much more difficult to articulate.

There are five discrete types of working touch: indirect, "hard to do," purposeful, acquiescing, and embarrassing. With the exception of indirect touch, these touches connote some emotion although it is different from the emotion that is conveyed with either the caring or the protective touch. Many of the activities discussed above involve one or more of these touches. There is, however, a large "neutral" element to many of these activities. The informants stated that often one went about doing these activities in as matter-of-fact a way as possible, but that all of these activities that involved touching could be "flavored" by the nurse:

> N: What's a good word? Neutral. I don't think they [procedural, working] imply anything . . . . it depends on what my attitude is in regards to my actual job and what's involved in doing it and so again they would be positive or negative.
>
> N: There's a good way to rip off tape and a bad way to rip off tape.

Accordingly, the nurse can determine, in many instances, whether the patient experiences an activity involving touch as neutral, positive or negative. This holds true even when it is an activity where one of the types of touch ("hard to do," purposeful, acquiescing, or

embarrassing) is also involved. The ability and willingness to affect this "flavoring" by the use of either a caring or a protective touch is determined by the complex interaction of the variables that inform the touching patterns of ICU nurses which is discussed in the section *Patterns of Touch*. Each of the types of working touch is discussed below.

Indirect touch. This touch is mediated by an object and requires no skin to skin contact. For example, during the procedure "instilling and suctioning" where sterile saline is injected into the endotracheal tube, large breaths given, and secretions suctioned out, the nurse does not touch the patient's skin. The touch is mediated by the endotracheal tube, the suction catheter and, in most instances, gloves. Another example of indirect touch is boosting the patient up in bed and turning on his or her side by using a draw sheet. This was described by informants as a touch even though there is no skin to skin contact required. Indirect touch occurs frequently in the ICU and can be a "neutral" touch, although it is frequently an unpleasant touch for the patient (suctioning for instance is an unpleasant experience). There is frequently a verbal component to this touch, for example: "I'm just going to put some water down your breathing tube and clean it out, it will feel bad but it will help you to breathe." The informants indicated that the absence of a verbal component would make this touch "worse" for the patient and hence to make this touch less negative, they add voice and comforting touch: "I will almost invariably use the comfort touch while the procedure is going on [to make it less negative]." It is similar in many ways to barrier touch but differs in that it is not necessarily employed to protect the patient or the nurse and does not create the distance, either physical or emotional, that barrier touch does.

"Hard to do" touch. This type of touch is associated almost exclusively with tasks, particularly procedures. A "hard to do" touch can have either a physical or an emotional component, or both. This informant's statement illustrates this:

> N: It's hard to hold back an 88-year-old grandpa's head with ankylosing spondylitis when they're trying to intubate him and he's saying "no, no, no, I don't want to do this!" That is incredibly straining on you as a nurse emotionally and, it is hard to do physically as well because you are inflicting discomfort on this patient, supposedly to help him, whether you believe that or not.

A touch then, is "hard to do" if it: 1) inflicts discomfort or pain on the patient, 2) is physically difficult to execute, and/or 3) generates a caring/curing conflict in the nurse's mind. Often this touch makes the nurse feel "bad" and there will be a verbal component that is apologetic, or she may carry out the procedure reluctantly. The nurse's affect with this touch can be matter-of-fact in order to expedite the procedure, ". . . sharp, definite, purposeful type of movement to get them into a position usually is what it is, in order to, you know expediate I guess the insertion of the line or whatever," or it may be consistent with the affect of some of the caring touches. This type of touch is one of the most likely to elicit the use of caring touch, in particular, consoling touch. As well, if this touch is hard to do *physically*, such as the insertion of a urinary catheter in an uncooperative patient, the nurse may use a rough touch (or one or more of the other controlling touches) because she is frustrated, particularly if she has had a "trying" shift.

Acquiescing touch. Acquiescing touch occurs exclusively with medical or medically generated procedures. It is similar to "hard to do" touch in that it can be emotionally difficult for the nurse to do this type of touch, but it differs sharply because it is done with a feeling of resignation. This is not a proactive touch in terms of achieving any benefit for the patient in the nurse's mind. It occurs with aggressive medical treatment of the patient that the nurse believes is futile, or worse, violates the patient's dignity and integrity as a person. The classic ICU example is "swanning the 98-year-old patient." These nurses have strong feelings about physicians who "never say die" even when the patient has a hopeless prognosis and/or is very old and ought to be allowed to die peacefully and comfortably. However, in the ICU nurse's have no choice about assisting with such procedures. Rather than experience the high emotional tension that accompanies anger or simply because there is no point in being angry or protesting, many nurses develop a resignation that allows them to assist in such procedures without an expenditure of emotional energy. The touch is characterized by a flat affect, rote performance of tasks, and a low verbal component. Skin to skin contact is perfunctory and probably the most

dispassionate of the touches because the nurse will not be as likely to incorporate the caring or protective touches. It is somewhat similar to the withdrawing of touch in that there can be an element of distancing, but it differs in the resignation and lack of emotion that the nurse feels.

Purposeful touch. Although the informants stated that all touch was purposeful there is a discrete type of touch called purposeful. It is the antithesis of acquiescing touch, also occuring during medical or medically generated procedures but with the difference that the patient is considered 'salvageable.' The classic example of when this touch occurs is with young victims of motor vehicle accidents (MVA) who require aggressive treatment including the insertion of catheters, massive crystalloid and colloid transfusions, constant assessment and monitoring of vital signs, multiple drugs, and so forth. As one nurse said:

> N: But then there are times when you do medical procedural stuff with the doc that's lifesaving and you believe in it and, thank God we did it!

In these instances the curative goal of the ICU is realized and the nurse feels rewarded and satisfied. This touch is fast paced and oriented to the patient's physical self. The nurse's affect is "up" because the goal is clear and the outcome the most desirable in the ICU--to save a life. To save life remains the *raison d'etre* of ICU. The verbal component of this touch is mostly linked to executing the required tasks. The skin to skin contact may be hurried and is definite, with little regard for patient comfort (a low priority at this time). It is an aggressive touch in the most positive connotation of that type of touch.

Embarrassing touch. Embarrassing touch is almost always connected with parts of the body that are usually associated with sexual function. Tasks, such as peri-care, urinary catheteriztion, administering enemas, and cleaning feces tend to require a touch that is embarrassing for both patient and nurse. The actual touch is differentiated by its pace and the nurse's affect and voice. It is done matter-of-factly, quickly, and with little eye contact. The verbal component may either acknowledge an awareness that the patient may be uncomfortable, be totally unrelated to the task at hand (e.g., be about the weather), or there may be no verbal component. The actual skin to skin contact may be cursory with light

strokes, finger tip contact only, and less than thorough if the nurse finds the task particularly embarrassing or distasteful. The informants all said that they would try to alleviate the patient's unease with talk and a matter-of-fact approach:

> N: . . . especially someone who is aware, alert and oriented and they've had a bowel movement in the bed . . . you know, the patient feels bad and you try and reassure them that, 'look we know you couldn't help it, we'll get this cleaned up as fast as we can, it's not your fault.'

This touch seems to be more frequent in two situations. The first is with a same age, opposite sex patient where there is a higher risk of sexual connotation to the touch. The second is with the elderly patient who may be perceived by the nurse as dignified and the particular task as undignified. The task most often eliciting this embarrassing touch seems to be catheterization of the young male patient:

> N: . . . partly because of the psychosocial kinds of things associated with, with having to touch the male penis I guess when you're 'cathing' them and, partly to do with . . . the patient's actual individual response to it . . . . I'll definitely with a male patient my age, I will avoid it if I can in the sense that if there's an orderly on I will definitely make a point of booking him for the 'cath' time. If it's an older male I won't get as hung up about it, although if they're really alert I will, and again it's not for me--I mean I do hundreds of them . . . this is not a new experience for me, but it may be for them.

Touch to accomplish a task was described by these nurses as "neutral," "mixed," and "either/or," the latter two reflecting the nurse's ability to make the task a positive or negative experience for the patient--even if the task is an inherently painful or unpleasant one. As such, task touch is probably the most important touch in the ICU by virtue of the sheer amount of time it consumes. This kind of touch was not the touch that the informants preferred to talk about. Often they dismissed it quickly as not being "real touch," simply something that has to be done. This may in part have been due to the fact that the "work" of the ICU nurse is in many ways regulated by others. The nature of the ICU demands structure and routine. These nurses were more interested in talking about caring touch which is not regulated, but rather is entirely the nurses' choice.

Three kinds of touch that occur in the ICU were identified and verified by the informants. Caring touch is unique in that it, for these nurses, captures the essence of

nursing. Protective touch is unique in its mechanisms of assisting with the ongoing survival of both nurse and patient. Task touch is unique in that it is regulated and can be used in combination with the two other kinds of touch to alter a dimension of the patient's ICU experience.

Patterns of Touch

The informants described a complex, highly interactive, and dynamic set of variables that inform the touching behaviors of ICU nurses and in part explain the touching style that an ICU nurse uses. These variables fall into three groups: 1) nurse variables, 2) daily variables, and 3) patient variables. Within each group variables interact and between each group there is constant interaction such that it is impossible to say there is any one categorical touching norm among ICU nurses. For any given nurse-patient dyad, in any given situation, on any given shift there is a pattern of touching, but it is a pattern in constant flux which is sensitive to the constantly changing nature of the variables within each of the three groups. These patterns are unique to the ICU sub-culture because the nature of the ICU is such that certain kinds of nurses work there, certain kinds of patients are admitted there, and unique situational variables exist. As well, ICU nurses share unique knowledge (explicit and implicit) of the behaviors that are appropriate and/or necessary for survival in the ICU. From the initial categories and from the card sorts a schematic of the variables that inform the touching patterns of ICU nurses was developed and is presented in Figure 2. All of the informants verified this schematic and the interactiveness inherent within it: "I think it's [touching patterns] the interaction of a number of factors both with the patient, with the nurse herself and the environmental conditions and everything that's going on . . ." and "They totally interact all the time . . . . they will determine how you perform."

It is important to note that Figure 2 is a static representation of variables. A more accurate representation, if it were possible, would be a fluid schematic that allowed the reader to visualize a sliding pattern of many dimensions, such that as individual variables

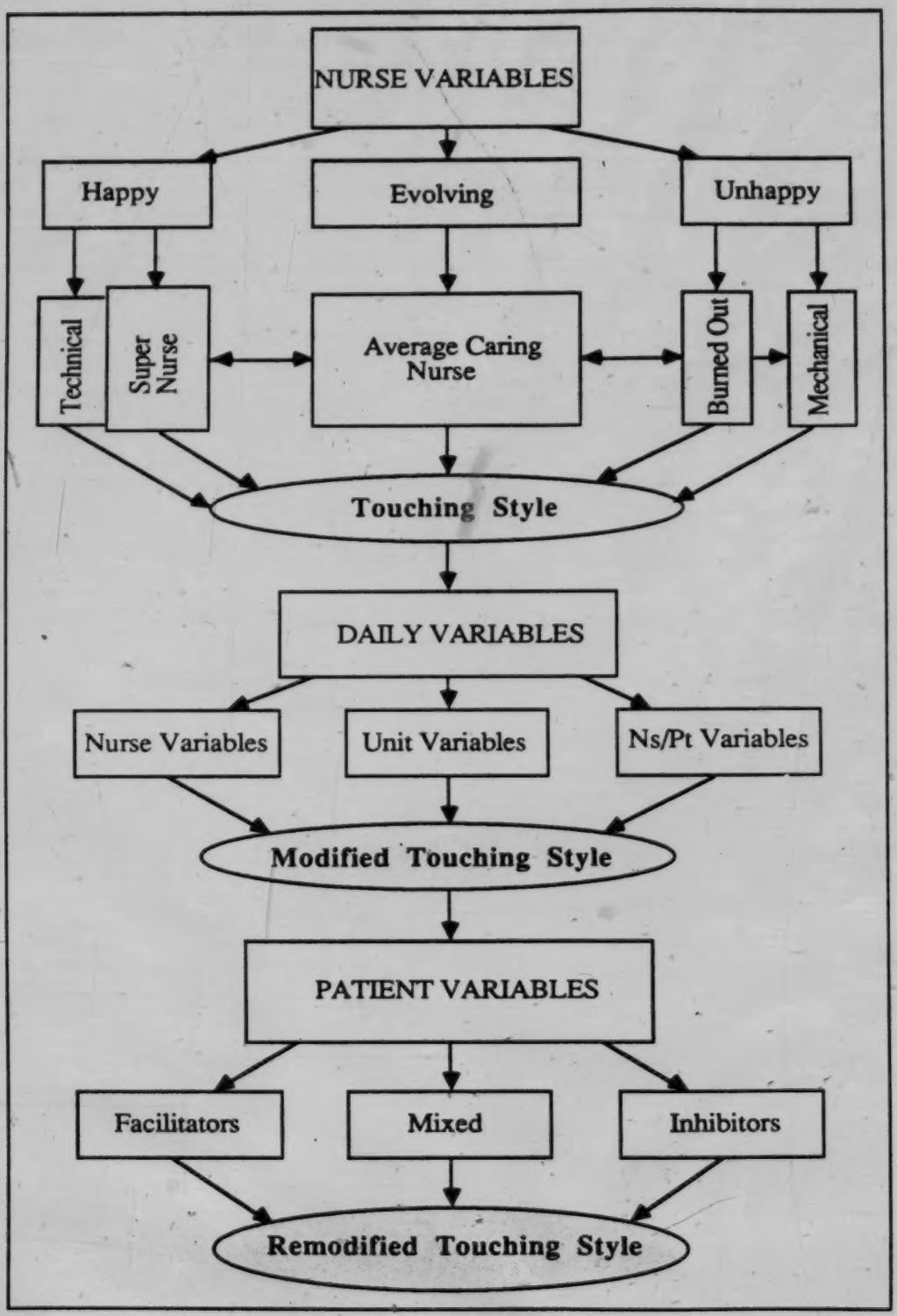


Figure 2. Variables determining patterns of touch

changed, the impact on the amount and kind of touch was evident. This would, however, require more space, detail, and sophistication than is practical here. As well, the complexity of such a picture would render it questionably useful as a reference. The temporal ordering of these variables generally flows from top to bottom, in the order of nurse variables, daily variables, and patient variables, although there is more back and forth movement between the daily and patient variables than between the three groups together. That is, the nurse variables are somewhat more resistant to change. The analysis of the patterns of touch for each of the three groups of variables are presented in the remainder of this section.

Nurse Variables

Types of People

Informants made it clear that the "personality" of the nurse was a major determining factor of patterns of touch. In depth interviewing and card sorting revealed that "personality" was a term used to refer to a complex set of factors. The nurse comes to her work first as person, that is she brings with her a cultural history--family, education, and social experience. This cultural history determines *what* type of person she is, whether she is, as the informants described, happy, evolving or unhappy. "Happy" as it is used here refers to one's sense of worth and wholeness, of integrity as person. The majority of people (including the informants) were characterized as evolving. They were described as being in the process of becoming mature, self-actualized persons with all the attendant struggles and "ups and downs" involved in the human experience. "Unhappy" refers to those people who do not feel good about themselves or their work for some reason. As might be expected, the informants indicated that an ability or willingness to use touch as a nursing strategy was tied centrally to one's feeling about self, so that an unhappy person for example, would not, either in amount or kind, use touch as a therapeutic nursing strategy. As well, although the majority of people were placed in the evolving category, the informants indicated that we all fluctuate at different points in our lives, dependent on our unique circumstance, in terms of these categories.

Types of Nurses

Average Caring Nurses. As can be seen from Figure 2 (p. 73), the informants identified "types" of nurses that they grouped under the terms already described. They characterized most nurses, including themselves, as "average caring nurses." A term that, as the study progressed, the investigator came to understand was inextricably tied to being human and, therefore, being vulnerable to the entire gamut of human feeling from which they could not disassociate. Consequently, the average caring nurse's behaviors, including touching are affected by her feelings and fluctuate, as do her feelings and her ability to cope with them, in any given situation. In this categorization, the average caring nurse is the most susceptible to changes in her touching behaviors based on other variables. Consistent with the term "evolving," she is also the most susceptible to change and growth: "I think even as a nurse matures and has more life experiences herself to base her feelings and her reactions on, I think that touch is something that develops . . ." Informants described her touching style generally as medium to high in amount and as more likely to be caring in kind, largely because she is more comfortable with the use of touch. She does however, use protective touch, including distancing on occasion, in order to execute her job and to survive in the ICU. They described this nurse as having the following characteristics: "able to relate to patients," "technically competent," "nurturing," "genuinely concerned," "able to put self in patient's shoes," "good communication skills," "sees patient as person," "empathetic," and "talks to patient a lot". During the card sorts one informant stated, "This is--sounds like the well-rounded, average, well-adjusted nurse."

Technical Nurses. Under happy, the informants identified two types of nurses, "technical" and "super nurse." The technical nurse was described as one who is efficient, safe, often very knowledgable, and consistent. She does not become emotionally involved with her patients and does not talk very much with them. She probably defines good nursing and caring differently than the average caring nurse, in that she would not view the caring elements as important, but rather would focus on the technologies and medical

aspects of work in the ICU: ". . . that type of nurse [technical] believes they're a caring person if they give good nursing care, like good technical care." She is rewarded by physicians and nurses for her high efficiency and level of technical/physiological knowledge and physicians see this nurse as a "good ICU nurse." Her touching style was described as being low in amount and mostly restricted to task and controlling touch because touch (as a therapeutic tool) is not an important part of her practice: "If you go to ICU with the idea that you're going to be 'Miss Super Technical Nurse,' touch is not an important facet of your care." Informants said that they would not feel bad or worry if a family member of theirs was assigned one of these nurses, although they would prefer that a super nurse or an experienced average caring nurse was assigned. This nurse is very stable in her behaviors, but it is possible, with the right combination of other variables, for her to exhibit higher, more caring touching behaviors. She was described by some of the informants as a "check it off the list nurse."

Super Nurse. The super nurse is "a rare bird." They are few and far between. She has all of the characteristics of the technical nurse except the emotional non-involvement. Instead she is the epitome of the caring nurse and her touching style was described as high in amount and predominately of the caring kind. She is stable and consistent in her performance--little flusters her, although the right combination of other variables can put a wrinkle in her otherwise calm exterior. All nurses can on a given day with the right combination of variables, be a super nurse, but the vast majority of nurses reach this altered state on an infrequent basis. As one informant said, "super nurse for a day." The true super nurse was described by one informant as "a naturally born beautiful person." Interestingly, informants stated that this nurse, along with the average, caring nurse is not rewarded for caring behaviors either by nursing or medical persons.

Burned Out Nurses. Under unhappy the informants identified two types of nurses. The first of these, "burned out" was the most frequently discussed type in this nurse variable section. The informants described "burn out" as the single most important variable

in causing a dramatic decrease in the amount of touch used by the nurse. As well, it changes the kind of touch used. There is a withdrawal of caring touch and a dramatic increase in the use of protective, especially distancing touch. The withdrawal of caring touch and the increase in protective touch is proportional to the "degree" of burn out. If a nurse is in a "high" burn out state as is represented in Figure 3, there will be little or no caring touch and an increase in distancing touch. This variable came up so frequently during the interviews that it merits additional comment.

Energy was the operative word informants used when discussing the "burned out" nurse: "If you felt touching was a giving of yourself and it is . . .there's lots of emotional self that goes into the touch . . . if I'm burned out I just don't have the emotional reserve left and so I touch less." Touching takes emotional energy, in fact, high levels are required to use caring touch and the burned out nurse is characterized by a depletion of energy reserves. As can be seen in Figure 3, the informants described stages of burn out, and differentiated between *normal* burn out (represented by the shaded area), that all nurses experience at one time or another and are susceptible to on a fluctuating, daily basis, depending on daily variables, and a more *progressive* burn out that is represented by the medium and high areas. Normal burnout is easily attended to by getting more rest, having days off, taking a vacation, having a change in assignments, and so forth. It was described using terms such as frustration, fatigue, having "had it," being short tempered, and out of sorts. It affects touching, but the informants did not view it as being as serious as the progressive form of burn out, primarily because it was seen as temporary, largely affected by daily variables and attended to relatively easily. The more progressive form of burn out is a much more serious state and consequently has a more profound and deleterious affect on touching. The nurse, especially as she progresses toward high burn out, has nothing left to give:

> N: When you're in a burn out state, your own energy level is exceedingly low . . . thought processes have got bogged down in the mire so bad that everything is so slow and so sluggish, you don't--you just don't function at an optimum capacity because your energy level is low, your interest level is low, your enthusiasm is gone.

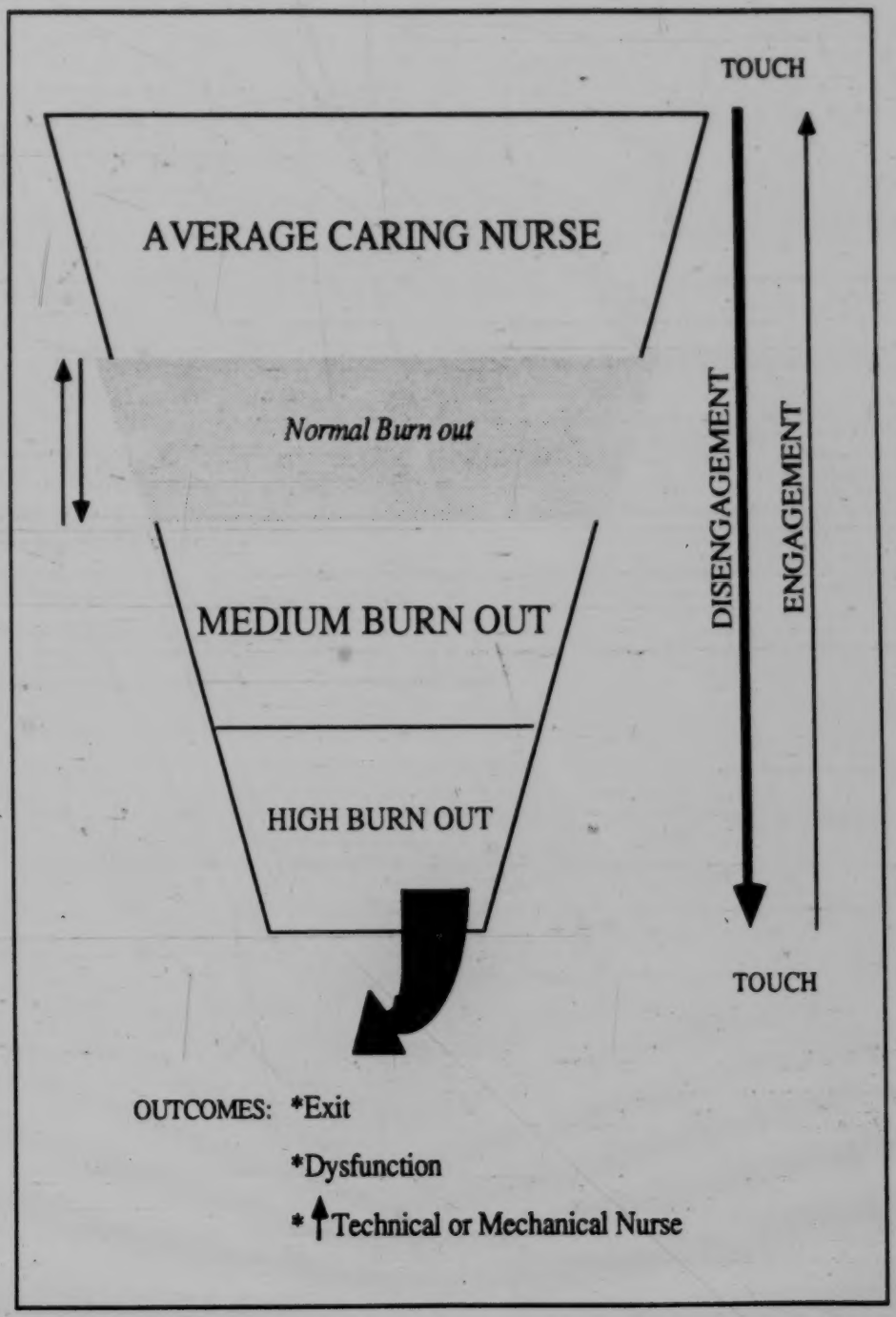


Figure 3. The process of burn out

These exerpts from a discussion of burn out and why it affects touching reflect some of the complexities of the relationship:

> N: This person is unable to deal with the situation, unable to give of themself [sic] anymore, they're the type of person that has--they need to be the receiver . . . . it can be fixed so that they can again give in a type of an emotional type of giving . . . . especially in the ICU's where you're dealing with death, dying and all that and it seems--almost you forget about all the people that got out and everything else just drags you down, and it--it gets to be quite a drainer on your personal stores . . . . everything drains out of you . . . .the most draining of anything is the emotional and so you don't give that . . . . It's like . . . people are pulling at you and you don't have it to give so you just back off.

The nurse who is experiencing this more progressive form of burn out is withdrawing in an attempt to conserve energy and protect herself.

Why nurses become burned out was beyond the scope of this study but informants suggested that it was a combination of very complex factors. Such factors as the trauma and suffering inherent in an ICU, consistently heavy and difficult assignments, work schedules, personal problems, and the boredom and routinization of an ICU, were described. As one informant stated: "These are the casualities of the environment lots of times and these people are salvageable I feel."

If unchecked, the nurse who is experiencing progressive burnout continues disengaging (see Figure 3), which was described by one informant as a protective mechanism akin to a porcupine curling up to protect their soft underbelly, leaving only sharp quills showing. As disengaging progresses there is less and less touch, especially caring touch, more of the protective, especially distancing touch, and the nurse is at higher and higher risk of using abusive touch.

> N: A high burn out person I haven't seen that often, but when I have they just don't even do the technical skills very well . . . . they're just zombies . . . . They just tend to do less and less work and communicate less and less with the patient. The quality of their work deteriorates and they start getting hassels with their co-workers 'cause their co-workers are carrying their load. And, then they either get so frustrated they leave or they take an LOA [leave of absence], or have major conferences with the NUS [nursing unit supervisor], or get rid of their husband that may be causing some of this in the background, or most of them leave.

This nurse is in trouble and needs to be touched herself--both literally and figuratively.

N: These people in the burned out pile [of card sorts] are the people that aren't being therapeutically touched back, they're not getting enough from their job, from the institution, from anybody, from their peers, from the management, from just the type of work we're doing. They're not getting touched at all and if you're not touched in some way, if you don't get *one* good thing out of a day then it's hard to be a therapeutic toucher yourself.

The informants stated that it was much more difficult to move up the scale and "engage" because it required so much energy at a time when it was most scarce, making it difficult for the "burned out" nurse to accept assistance:

N: Yeah, you need somebody to refill your tanks before you can give anymore, so it's [disengagement] a protective mechanism on your own part to keep you from going crazy . . . . you need your tank topped up, you're dry, you're running on empty, you're going on fumes.

N: Because touching is such an intimate, happy, good thing, you know, skin-on-skin . . . . the burned out person, they don't want to be touched, they've--they just want to be left alone and you tend to see them--they draw in and they shrivel and you can just see it about them. They don't want to be touched . . . .but I think deep down they need to be touched . . .

The most likely result of high burn out is that the nurse will exit the ICU. She may change ICUs, change specialties, take an extended absence from work or in some situations leave nursing altogether. Less likely is that the nurse will remain and become dysfunctional or *mechanical*. The latter choices affect touching style in that these nurses were described as low (decreased caring touch) or negative (increased nurse protective touch) touchers.

Mechanical Nurses. These nurses are characterized by an emotional withdrawal and near total disengagement from their work and consequently their patients. Although there may be some nurses who are in this category as a result of the particular cultural experience they have had, the informants indicated that most of these nurses were in this category as a result of "terminal burn out." These are the nurses who did not exit the ICU or seek and find a way to "heal." They are somewhat similar to the technical nurse in that they move toward functioning at a more technical, non-emotionally involved level but differ sharply in that their behavior extends beyond functioning solely on a technical level. It is quickly replaced by functioning in an automated, mechanical, almost robot like manner. They may not be at all consistent, may be "sloppy" in their practice, do not have a tolerance for

frustration and tend to be profoundly "unhappy" which is reflected in their tendency, in some instances to "bitch" and "complain." Conversely, this nurse may withdraw almost completely, functioning only on a minimal level. This nurse, as one informant put it, "needs to leave the ICU." She is not viewed as being as "salvageable" as is the burned out nurse. Her touching style is characterized as low in amount, with no caring touch and if she is not too apathetic, a high use of the protective touches.

One final factor is significant as a nurse variable, the beliefs of the nurse. This factor was woven throughout all the interviews and did not stand separately. Beliefs are a combination of the person's value system and the generally held beliefs of ICU nurses. Personal beliefs are a combination of the cultural influences of the nurse, such as her family, education, religion, socioeconomic status, the societal norms, and her personal experience. For example, these informants all believed that touch was an integral and important part of people's lives and positively influenced their experience of growth and development. They consistently described their own standard of living-- clean, hardworking, responsible, and independent--as influencing their nursing in terms of how they viewed patients with different standards and lifestyles. Other frequently described values related to one's comfort with one's own sexuality and one's feeling toward the aged in our society. Touch was not infrequently discussed relative to its sexual connotations, which seemed to be a reflection of each nurse's individual experience and the norms of society at large. There was great variation between the informants regarding the sexualizing of touch--generally the more sexualized it was, the more cautious they were in its use. Personal beliefs about the aged and their value in our society also varied among informants. Generally, the greater value placed by the nurse on the aged, the greater their effort to use touch therapeutically. As well, the elderly and children appear to be viewed as "lesser sexual beings" which facilitated, for some, the use of touch.

The generally held beliefs of ICU nurses are reflected, in large part, in the *patient variables* section. The most frequently occuring belief centered on "who was a legitimate

ICU patient?" Nurses, who, for example did not believe that the very old should be admitted to an ICU would find caring for them more difficult and less satisfying and their use of touch would be affected.

The types of nurses identified represent the nurse variables that influence touching patterns. The type of nurse one is at any given point results in a *touching style*. This style is modified and remodified by the daily and patient variables.

Daily (Contextual) Variables

As can be seen in Figure 2 (p. 73), there are three groups of daily variables which the informants identified: 1) daily nurse, 2) daily unit, and 3) daily nurse/patient. These groups of daily variables were described as transient, in that they were constantly changing, and hence, exerted a temporary influence on the nurse's touching style specific to the particular shift that she was working. They can and often do change in the course of a shift. Within each group of daily variables there are variables that exert either a positive (increased caring or decreased protective touch) or a negative (decreased caring or increased protective touch) affect on touching style. This informant's words capture the crux of *how* they work to do this:

> N: I think a lot of the touching . . . depends on . . . what I feel I can give of myself on that day . . . . there's times when you just don't have it to give.

What a nurse gives on a shift is influenced by her own state of feeling on a particular day, the climate of the unit and the type of nurse/patient relationship that exists.

Daily Nurse Variables

Daily nurse variables that exert a positive influence on touching style were described with phrases such as "in a good mood that day," "lots of energy that day," "stable, happy personal life," and "feel good about self." Daily nurse variables exerting a negative influence were described with such phrases as "tired that day," "bad day at home," "upsets in own life," "high stress level that day," and "high frustration level that day."

The level of fatigue was repeatedly identified as a major variable. Everything is more difficult to cope with when the nurse is tired, particularly in an environment as physically

and emotionally demanding as the ICU. How the nurse is feeling, her mood, is closely tied to her fatigue or energy level and her physical health (e.g., having a cold can be very draining) which can affect thinking, feeling, and doing:

> N: Obviously how I'm feeling on any given day, how much rest I've had, whether there are things going on in my life that are clogging up my head or my heart or my hands [affects how I will touch].

These nurses believe that how one feels about oneself is readily communicated to the patient:

> N: If I'm in a good mood and I'm feeling good about myself and I like everything that's going on, then I'm going to touch people more. Not only that, when I touch somebody, the general feeling of goodness or well being is something that should, is most likely going to be communicated through *every* type of touch that you use.

During the *patterns* card sorts one variable, "new to ICU" was frequently sorted by itself as a nurse variable that didn't fit anywhere else. It was categorized as a daily variable because of its transient nature, that is, nurses remain new to ICU for limited periods of time. The new to ICU nurse is overwhelmed with the technological, physiological and other knowledge that she must master. Consequently, her attention frequently focuses on the more technical nature of her work, as opposed to the more caring dimensions of nursing, including touch. This is true even if this nurse is experienced albeit not in ICU. This period of newness is one of rapid growth and although this nurse is focused on the more technical aspects of ICU nursing, she does, as will be discussed in the process findings, *Acquiring a Touching Style*, learn the touching pattern of the particular area in which she is working.

Daily Unit Variables

The interpersonal climate and the level and kind of busyness in the unit are the primary variables in this category. Phrases such as "like [my] co-workers on that day," "personality clash with co-workers on that day," "lots of private time time with patient," and "everybody on the team at your patient all day" were used. Pleasant, cordial co-worker interaction exerts a positive influence on touching style. Conversely, strained interaction exerts a negative influence.

The variable, busyness is more complex. *True* ICU nurses thrive on an active, busy, exciting day, particularly if they believe that the activity has purpose,that is, has the potential to save life:

> N: We thrive on stress, we thrive in high activity, we thrive in a demanding environment . . . if anything I think that sometimes that can have a very positive effect [on touching] . . .

High activity occurs for instance with a patient who is "going down the tubes" and requires such interventions as multiple physician consults, frequent laboratory work, large infusions of colloid and crystalloid, insertion of hemodialysis and pulmonary catheters, multiple vasoactive intravenous drips, emergency trips to CT scan, and so forth. There is a definite and substantial increase in the amount of task touch that is used in these situations. The way that this task touch is done and the use of caring touch is also influenced by the nurse variables described thus far. The simple fact that time is at a premium for the nurse in this situation does work, however, to make the task touch more hurried and efficient of time and energy. The nurse in this situation is coping with an immense intake of information and has a need to rapidly translate it into action.

One informant commented that these sorts of days had a tendency to "flatten" nurses out:

> N: The highly technical nurse [and] the nurse that really concentrates on touch [as a therapeutic tool]--it kind of levels them out, they both look the same around the bedside that day.

Daily Nurse/Patient Variables

This variable was summarized best by the statement: "One of the things I find is that whether my personality will like *mesh* with the person that I'm working with . . ." A mesh occurs when the nurse likes the patient and there is a rapport between them which the informants described as "being able to relate to the patient." It usually occurs with a responsive patient, and the patient's family can be influential in establishing a nurse/patient mesh. Whether or not a nurse likes a patient appears to be a strong component of how she relates to them. One informant was able to recall vividly, five patients that she had actively

disliked over the course of her career, and describe how she, a self-described high toucher, had not been able to touch them therapeutically. This mesh is well summarized in the statement:

> N: . . .then you find out, kind of like if you do click. I think that's another important thing, I really do. Because you can't . . . like everybody . . . you can still give excellent care and . . . you don't have to like the person and in those cases . . . I pull myself back and I don't give of myself emotionally . . . I'll do what I have to do and that's the end . . . and then for someone I really like, I'll do absolutely everything that I can do for them you know.

The action of the daily variables described results in a modified touching style. This style is not static. It can and does change as nurse and daily variables collide and the nurse makes adjustments. The final large group of variables that work to remodify touching style and create a pattern of touching are the patient variables.

Patient Variables

The patient variables represent the largest group of variables that inform the touching patterns of ICU nurses. This is the group *within which* there is the most intense interaction of individual variables because patients possess multiple variables, often conflicting in their tendency to mitigate in different directions. As can be seen in Figure 2 (p. 73), there are three large categories of patient variables: 1) facilitators, 2) mixed, and 3) inhibitors. As the study progressed, informants discussed not only the facilitation or inhibition of caring touch, but the use of protective touch in response to these patient variables. Facilitators of touch work to increase the frequency of caring touch. Inhibitors work to decrease the frequency of caring touch and increase the frequency of protective touch. The mixed category represents a group of variables that are more heavily influenced by the nurse variables, including the belief system of the nurse, that is, they are more heavily dependent on the nurse's original touching style. The facilitation or inhibition of touch, although dependent in to some degree on the nurse variables, are more a reflection of professional (ICU) belief systems.

Facilitators of Touch

In Figure 4 the three categories of variables that facilitate touch appear. They are: 1)

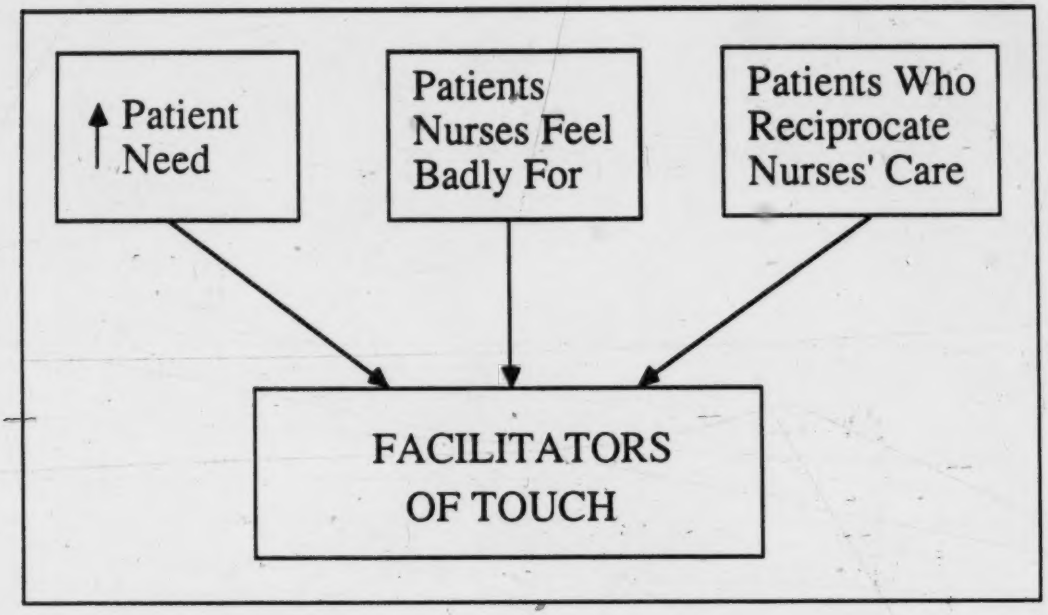


Figure 4. Facilitators of touch.

increased patient need, 2) patients the nurse feels badly for, and 3) patients with whom the nurse has a reciprocal relationship. Each of these is discussed in the following sections.

Increased patient need. "These are just all the sick people that need, for one reason or another, to be touched during your care in just a human, warm way because they're sick and they need it." This category includes patients who are uncomfortable, in pain, tense, scared, anxious, confused, and agitated. These patients are all, in the nurse's mind legitimately in need of the unique help and comfort that the nurse has to offer through caring behaviors, including touch. Examples of patients who would exhibit these characteristics include children, the mentally retarded, burn patients, pavulonized (pharmacologically paralyzed) patients, and first-time overdoses (ODs). The first time overdose is an interesting inclusion since, as will be seen in a later section, ODs are generally viewed very negatively. However, with the first time OD, nurses seem to be able to empathize, especially if the OD is precipitated by an event such as the death of a spouse. "First time overdoses you know, who knows I may be wearing their shoes some day." On the other hand, with the repeat OD, the nurse's empathy seems to dissipate. Patients in this category were also perceived as generally wanting to get better which is desirable in the nurse's mind.

Patients you feel badly for. This category seems to elicit high levels of compassion and empathy in the nurse--emotions that bring out her caring nature which can be operationalized through touch. Included in this category are unfortunate victims, tragic cases, patients with a poor prognosis and the terminally ill, patients on compassionate care only, patients who had been "poked and prodded," and same age patients. Many of these patients are "no fault" patients; one of the most potent and desirable characteristics a patient can possess and which will elicit those feelings in the nurse that facilitate her use of caring touch. ICU nurses' beliefs about "no fault" patients are well expressed by this informant's words:

> N: I think the whole job is energy depleting. You kind of resent expending the energy on somebody who didn't have to be there, who, if they'd used their

> brains, wouldn't be lying flat on their back with all kinds of tubes and needing all kinds of care and going through thousands of dollars a day.

Although some informants said that with these patients one may need to distance oneself to protect against emotional pain, there was a sense of generosity about the way in which these nurses described to the investigator how they would give of themselves.

Unfortunate victims, tragic cases, and "no fault" patients are highly desirable as they are in the ICU for reasons beyond their control and bring out caring behaviors in ICU nurses. "Unfortunate victims well, there you go--I mean, the support comes out in all of us." They include such patients as innocent victims of car accidents, industrial accidents, and patients, especially the young with a devastating disease that they have acquired through no fault of their own (e.g., toxic shock syndrome). Nurses enjoy the type of care they require and can empathize highly with them. They are frequently 'treatable' with defined goals of therapy and hope of recovery. In discussing this particular aspect of the kinds of patients ICU nurses preferred one informant captured the frustration of dealing with other, less desirable kinds of patients with this phrase: "Where *are* all the car accidents??"

Patients with whom the nurse has a reciprocal relationship. Reciprocity, as discussed earlier, is an important component of caring touch. Patients who respond are giving positive feedback to the nurse and they are touched more and in a more therapeutic manner: "And the feedback normally tends to be positive and the more positive strokes you get from that patient, the more I find that I tend to give strokes back to the patient." It is not a directly proportional situation however, one very positive stroke from a patient can carry the nurse through many situations where there may be no feedback. Included in this category are patients who appreciate your care, conscious and alert patients, quiet and "perfect" patients. Appreciating nursing care is an important variable in this section. "A patient who appreciated my care . . . obviously I'm going to respond to them better so these people would get touched more. I respond well to them emotionally." This was probably emphasized so much because so few ICU patients are able to show appreciation. Families can substitute for patients, by showing their appreciation. Conscious, alert patients are

obviously in a position where they can respond. Quiet and "perfect" patients have the ability to respond but more importantly these patients are easier and less trouble for the nurse to look after. "It makes it a hundred percent easier, yeah to look after [them] . . ."

Inhibitors of Touch

In Figure 5, the major categories of variables that inhibit touch are outlined: 1) behavioral, 2) risk/benefit ratio, and 3) culpability. Sub-categories are also shown. This rather large group of variables was the most straight forward to elicit and appears to be more potent as a group than the other two, in informing patterns of touch.

Behavioral problems. "These patients are the ones that try you especially if you're not . . . into it that day or if you're not having a good day, these are the patients that are just absolutely the worst to look after." Being the *worst* to look after relates to the frustration that they cause the nurse and the patience they require. Patients in this category were divided into two sub-categories: 1) those whose behavior was within their control, and 2) those whose behavior was beyond their control. In the first group are the following behaviors: demanding, verbally abusive, physically abusive, uncooperative, aggressive, combative, and obnoxious. In the second group are: restless, wingy, out to lunch, confused, agitated, and "picking." The determination of whether or not the behavior is within the patient's control appears to be somewhat arbitrary on the nurse's part, except in instances where a cause can be identified, such as, xylocaine toxicity, hypoxia, hypercarbia, ICU psychosis, and so forth. Nurses have less patience and tolerance for patients whose behavior is determined to be within their control. Consequently, this will affect touching style more adversely.

These patients are difficult for the nurse to care for in large part because she has lost control over their behavior, and as discussed earlier, control is critical in the ICU for many reasons. Also, these patients do not reciprocate; they reject care, giving the nurse little motivation to touch them in a therapeutic manner. The nursing measures of restraint and sedation are used frequently with these patients. The more experienced nurse will use

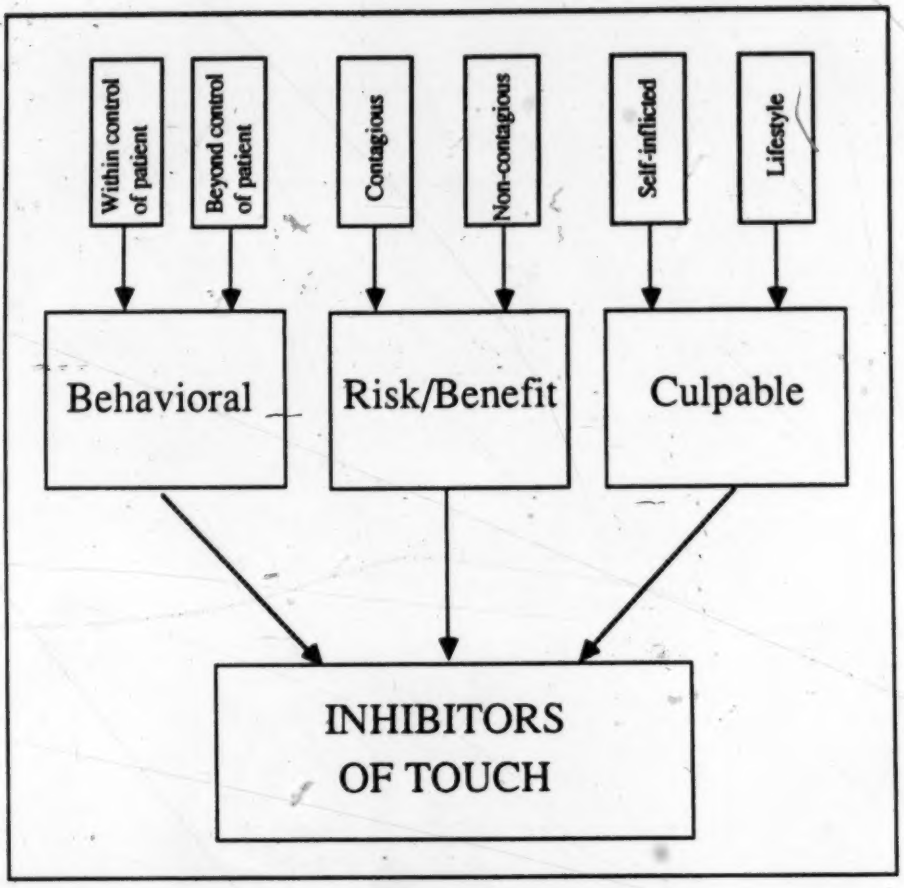


Figure 5. Inhibitors of touch.

these sooner than the less experienced nurse because she has learned that these behaviors (especially the ones beyond the patient's control) can quickly spiral into an unmanageable situation for her. The "picking" patient represents one of the most frustrating of all these patients for the nurse. Picking is constant behavior that wears the nurse down. This patient requires constant vigilance to avoid catheters from becoming dislodged, and is virtually impossible to keep looking clean, tidy, comfortable--in short, well cared for, for which there is strong peer pressure. The "picking" patient seems to work adversely on the nurse's frustration and patience the most, and consequently is one of the most likely to affect touching behaviors. The pattern of how patients with these behavioral variables are touched is illustrated by this passage:

> N: I think, initially they go into sort of a more "touch phase" because the theory being that if I touch him and I'm gentle and soothing with him that he's going to calm down and be less aggressive and that sort of thing. And, when that doesn't work, then your patient who continues to be restless, picky, demanding, agitated, confused, aggressive, abusive, obnoxious is going to then start to get touched in a negative way because the nurse is going to start . . . with the 'slap your hands and leave them alone type theory' of the . . . restraints. I think I see a lot of nurses who tend to get more aggressive toward the patient who is aggressive and agitated and irritated. And then it gets to the point where she gets a grip on herself, can't hold it you know, can't carry on fighting with him forever. And then the tendency is to just sort of withdraw from that patient and try to avoid contact with him as much as possible because touch in fact, seems to bring on more negative, quote negative behavior on the patient's part.

Risk/benefit ratio. In determining the risk/benefit ratio for any given patient, the nurse weighs in her mind the potential benefit of touch to the patient against the risk to herself of touching that patient. Fear of an injury or of acquiring a disease is a very real and legitimate fear for ICU nurses, and one they take seriously. Most of this fear is a reasonable, common sense type of fear, but informants described some nurses who "go over the deep end" with their fear. These few nurses do not respond to education or reason and are likely to use far more barriers (gloves, gowns, masks) and barrier touch during their care and to be absent from the bedside as much as possible. All nurses are susceptible to some exaggerated fears, for example, the fear of lice. A patient in the ICU with lice can send the entire staff home scratching with the appropriate shampoo, whether or not they have had

any contact with the patient. With all of the patients in this category, the tendency is toward a withdrawal of touch, rather than toward the use of protective touch, except with the physically abusive patient.

This category can be further sub-divided into two groups: 1) contagious and 2) non-contagious. Within the non-contagious group are patients injected with radioactive isotopes, patients with lice, obese patients, and physically abusive patients. The latter two represent a threat to the nurse physically in terms of injury. The patient with radioactive isotopes in his or her system represents at least a perceived threat to the nurse's reproductive ability and the patient with lice seems to represent a threat to the nurse's standard of hygiene.

Within the contagious group are found the most frightening patients for nurses. As one informant said, "There are certain diseases that obviously put the fear of the Lord into the bedside nurse." Included here are such patients as those with AIDS, hepatitis *B*, TB, genital herpes, undiagnosed skin rashes, and so forth. These all connote risk to the nurse. These contagious variables can be further divided into those that are a physical threat only such as, TB, hepatitis *B*, skin rashes and those that are a physical threat and have psychosexual overtones as well, such as, AIDS and genital herpes. "You have that distancing need, that barrier, that *oh God* I don't want to get this, I don't want to be like that."

AIDS and hepatitis *B* were the two most discussed threats to nurses: "The two that I could pick up most readily in my mind would be an AIDS patient and probably the patient that I fear the most and that's a patient with active hepatitis *B*." Most of the informants placed the patient with AIDS as the highest risk to the nurse and felt that touch would be most affected by this. Although there are psychosexual overtones with the AIDS patient: "You betcha, I mean first of all the guy's got to be gay, right--sure let's not touch him, he's wierd." The overriding fear is of certain death, "Not to me [does it matter whether the patient is gay or straight], it does to some but I don't care, I just don't want AIDS no matter

whether you're heterosexual, homosexual or a drug user, I just don't want it." The informants generally spoke of the AIDS patient in highly compassionate, non-judgemental terms. It seems that the fear these nurses have is primarily related to acquiring a fatal disease.

Culpability. This category of patient variables is perhaps the most difficult one for nurses because it represents a direct conflict with the nurse's beliefs and values. It can be sub-divided into self-inflicted and lifestyle groupings. In the self-inflicted category are patients who have caused their own problems, either deliberately or by doing something "stupid" (e.g., getting drunk and having an accident). Such patients as alcoholics, ODs and obese patients are found in this category. Repeat offenders are viewed especially negatively because they are seen to waste the time and resources of the entire health care team. The fact that these patients are viewed as having a choice and choose to die, or to be unhealthy seems to create an especially difficult dilemma for nurses. This dilemma, and anger and frustration is even clearer when these patients are contrasted with unfortunate, innocent victims and tragic cases. As well, the care involved with many of these patients is difficult and unpleasant for the nurse (e.g., managing GI bleeds, giving charcoal and laxatives to ODs, etc.).

In the lifestyle category are patients whose lifestyle differs radically from that of most nurses, for instance, dirty patients, skid row patients, patients who have lice, patients who take no pride in themselves (e.g., obese patients, substance abusers, etc.) and Native Indians. This informant's words reflect generally, the feelings of these nurses:

> N: Most of us aren't dirty, and we don't smell bad, and we're not obese, and we're not gross. You get a real bias toward those patients . . . they're people that just haven't looked after themselves and they slide down the slippery slope--patient with a very different lifestyle from you, and I think that says it.

Some further explanation about the Native Indian patient is needed because of the frequency with which they were discussed and because of the ease with which the issue can be misconstrued. Their placement in this category, when no other ethnic groups were identified, seems to be a reflection of two factors. First, these nurses associated the Native

patient with many of the self-inflicted and lifestyle variables that have been discussed thus far, based on their experience. Second, there seems to be an element of prejudice towards Native Indians that is probably a reflection of a general societal attitude. Several of the informants stated that our general (Caucasian) lack of understanding and information about the Native people and their culture perpetuated this attitude. One informant discussed using less touch with a Native patient because of her belief that Native people were uncomfortable with touch, especially from white people. Although all of the informants expressed some degree of concern that they would appear to be racist, they all remained firm that Native Indian patients were treated (including touch) differently.

Mixed Effect on Touch

This large category of patient variables illustrated in Figure 6, was identified as influencing touching patterns of nurses, but the direction of the influence is not consistent. For some nurses the variables facilitate touching, for some they inhibit touching and for some they appear to have no affect on touching patterns. The major factor in the direction of these variables' influence is the nurse herself, that is, all of the nurse variables discussed so far, including the personal and professional beliefs of the individual nurse. This is especially true of the age/sex category. Some categories of variables (e.g., family and unstable patients) are influenced as well by daily variables more than others. The major categories in the mixed effect category are: 1) age/sex, 2) family, 3) unstable patients, 4) holding pattern patients, and 5) non-responsive patients.

Age/sex. Age by itself was not a factor for some of the informants. Generally speaking, however, it appears that the very young and the very old are touched more. They were categorized as similar in their frailty and in their lack of sexuality. As well, there are not the sexual connotations with either of these groups. Children were the only group of patients, among all of the variables in the *patterns* section, whom all informants stated were *always* touched more. With children, even if the nurse does not like them, or is afraid of them, the norm to touch appears so strong that she will at least try to employ more caring

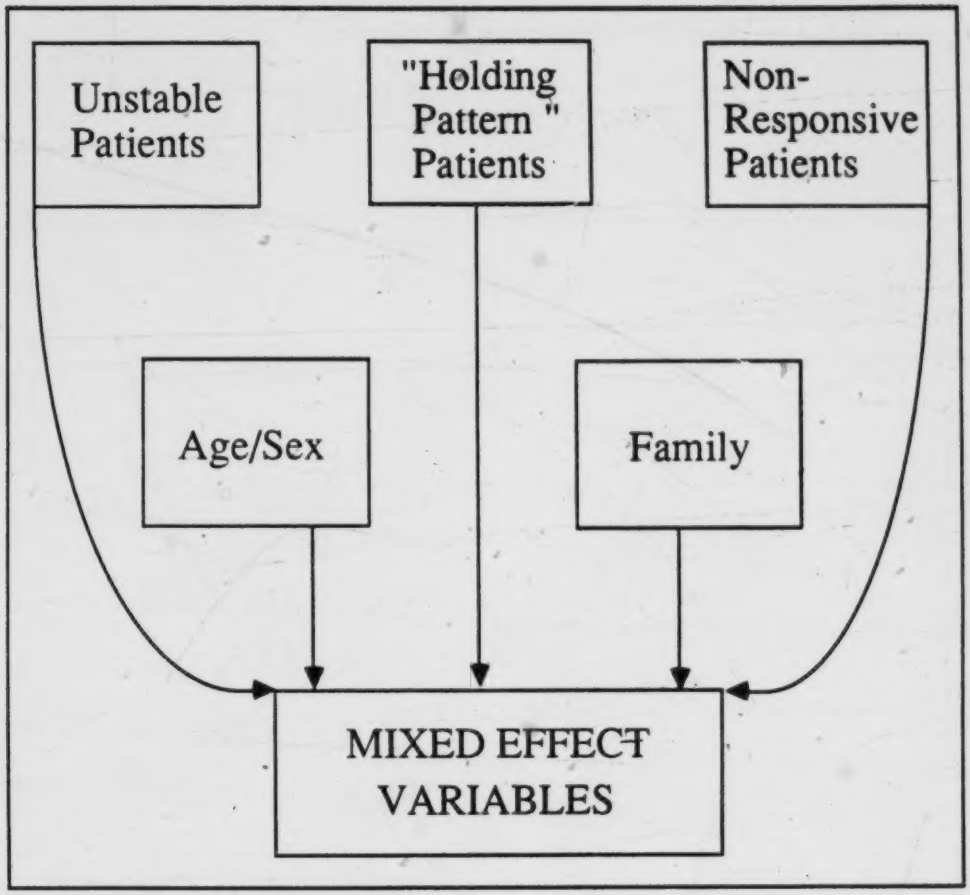


Figure 6. Mixed effect variables.

touch--even if she is a technical or mechanical nurse. Those informants who said they would touch same age male or female patients less said it was because of the sexual connotations of touching same age people in our society. Same age male patients were the patients most frequently described as being touched less in this category because: 1) the nurse assumed that they would have an increased discomfort with touch, 2) the nurse did not want her touch misunderstood by others, and 3) these patient's wives might not understand or appreciate young female nurses touching their husbands. Some informants stated they would touch same age patients of either gender more because they could most easily relate to this group. A number of informants said they would find touching the same age female patient easiest because "I think that because we're women we can relate to female patients our own age and how they feel and how they react."

Elderly people were generally described by the informants in terms of the respect they deserved and the informants' ability to relate to them as they would to their own parents and grandparents. They were often viewed with compassion because they were in an ICU during their last days to endure the indignities that are an inherent part of ICU. Although the informants described nurses who disliked taking care of the elderly and consequently would spend less time with them and touch them less and/or differently, none of the informants expressed this of themselves.

Family. There was tremendous variation among informants with this variable. The nurse-family relationship was not significant for some, in terms of their touching style, in fact they said it would have no effect. Others stated that a "nice" family, or one you could relate to and liked, made it easier to touch the patient. Some stated that a hostile or angry family would make it difficult for them to touch the patient therapeutically--at least when the family was at the bedside. Occasionally, the hostile family caused the nurse to avoid the patient as much as possible. An absent family, for some of the informants, was a factor that increased their caring touch because they believed the patient needed extra support and hence the nurse acted as a substitute for the family.

For some, the family's absence made it harder for them to see the patient as a person or to comprehend who the patient was before their ICU admission. The presence of a supportive family indicated for some that the patient was in need of less support (and touch) from the nurse. Family presence was sometimes seen as a stress for the nurse because it increased her workload and distracted her from her work with the patient. One of the most interesting findings is how, for some nurses, the family can change the effect of some of the inhibitor variables:

> N: He [the patient] is physically repulsive but his family are in there all the time touching and they've got funny cards for him and . . . they're very, very caring and when you first look at him you think, oh my *God*, and then when you see the family [with him] it's suddenly not, oh my *God* anymore, it's--he's a *person*.

Unstable patients. Unstable patients were described as ones who were "going down the tubes" or as "crumping." They are physiologically unstable and require intervention in order to be stabilized. Informants stated that these patients would receive high amounts of technical task touch. Some felt this would in many instances prohibit the use of the caring touch because of the demands on the nurse's time and could result in cursory or rote physical and verbal interactions with the patient. Others felt that these patients needed the caring touch because they were often scared and that it *was* possible to use it, if only in a limited manner. The type of nurse one is becomes a significant factor here (e.g., an average caring nurse vs. a technical nurse).

Holding pattern patients. These are patients who are "going nowhere," except as one informant put it "to the morgue." They include "dumps" (patients who have been transferred to the ICU because they have been inadequately cared for elsewhere or have a nearly hopeless prognosis), chronic long term ICU patients (e.g., patients who are unable to wean from the ventilator) and for some, compassionate care only patients, patients with a poor prognosis and brain dead patients. The nurse who touches these patients less often does so because they provide little or no positive reinforcement. In addition, it may be that caring in the ICU is tied into curative functions: "I think our caring is related to the ability to cure partly." Other nurses seem to enjoy taking care of these patients and are able to

empathize with them and obtain satisfaction from the comfort and maintenance activities they are able to perform. This informant's words summarize well the feelings of the nurse who withdraws touch from these patients:

> N: . . . it gets to the point where you're sort of stagnating with this patient in an area where people are more accustomed to a fast pace, to a challenge, to seeing some progress, and if we don't see progress we usually see a regress then. We're not used to holding patterns and so eventually . . . this sort of "I don't want anything to do with him type of [attitude develops]."

The brain-dead patient is an especially difficult one for some nurses. Sometimes these nurses withdraw completely from them, performing only required tasks in an attempt to deal with the conflict of expending energy on someone who is dead and "alive."

Non-responsiveness. Included in this category are unconscious patients, heavily sedated patients, pavulonized patients, and brain dead patients. This variable can mitigate toward less caring and less protective touch unless other daily or nurse variables intervene. When this is the case, it is largely because of the lack of reciprocity with these patients, although it is sometimes because the nurse feels this patient does not have a great need for touch nor derives much benefit from touch. Most informants stated that they tried to touch and especially talk a lot to the unconscious patient in an effort to "reach" them. Much of this touch/talk with the unconscious patient seems to be "habit." It is an established norm in many ICUs to always give these patients the "benefit of the doubt" in terms of their hearing and comprehension. The pavulonized patient, because all of their senses are intact, is unique and is probably the single most challenging patient in the ICU if the nurse is willing to provide total and anticipatory nursing care. This nurse summarizes the approach that many of the informants take with these patients:

> N: I have a tendency to touch more in the hopes that, ok, with my pavulonized patient, I want . . . to talk to him and touch him and let him know that, "hey, you really are still here and we just did this to you and it's not going to last forever" . . . . I have a tendency to feel the same way towards unconscious patients . . .and brain dead patients, if only we can touch them enough to get them to wake up (laughs).

The action of the patient variables results in a remodified touching style. This remodification, however, is much more complex than that generated by the nurse and daily

variables. For example, a patient could be young and a tragic case, facilitating touch, but also have a contagious disease such as hepatitis *B* which would inhibit touch. This same patient could go on to exhibit behaviors that further inhibit touch, but also be a patient that the nurse believed was in greater *need* of touch which would facilitate touch. The possible combinations of variables are endless and are made more complex by the *mixed* category of variables which depend heavily on the nurse variables. The entire pattern of touching becomes even more complex with the consideration of the nurse and daily variables, and the constant fluctuation of the daily and patient variables. In an attempt to illustrate the interactiveness of all of the variables during a card sort, one informant stated:

> N: These piles [of cards] are interactive, because these are things that would make me spend more time touching the patient, and conditions under which I could spend more time touching the patient and talking to the patient. They're more or less . . . for instance, if you don't like the patient that much per se, or you can't identify with him, which is what was in the other pile, but you were in a good mood that day, then you can go that extra half mile and spend more time touching the patient. But if you're not in a good mood which was from the other pile, but you're able to relate to the patient again, you can spend more time touching them.

There are patterns of touch (touching norms) within the sub-culture ICU which are informed not only by the norms of behavior within an ICU, but as well, by the particular cultural experience of the individual nurse. These patterns represent a partial explanation of the touching style that an ICU nurse demonstrates. A more complete explanation requires an understanding of the process findings of this study, which are presented in the next chapter.

V. FINDINGS: PROCESS AND FIELDWORK

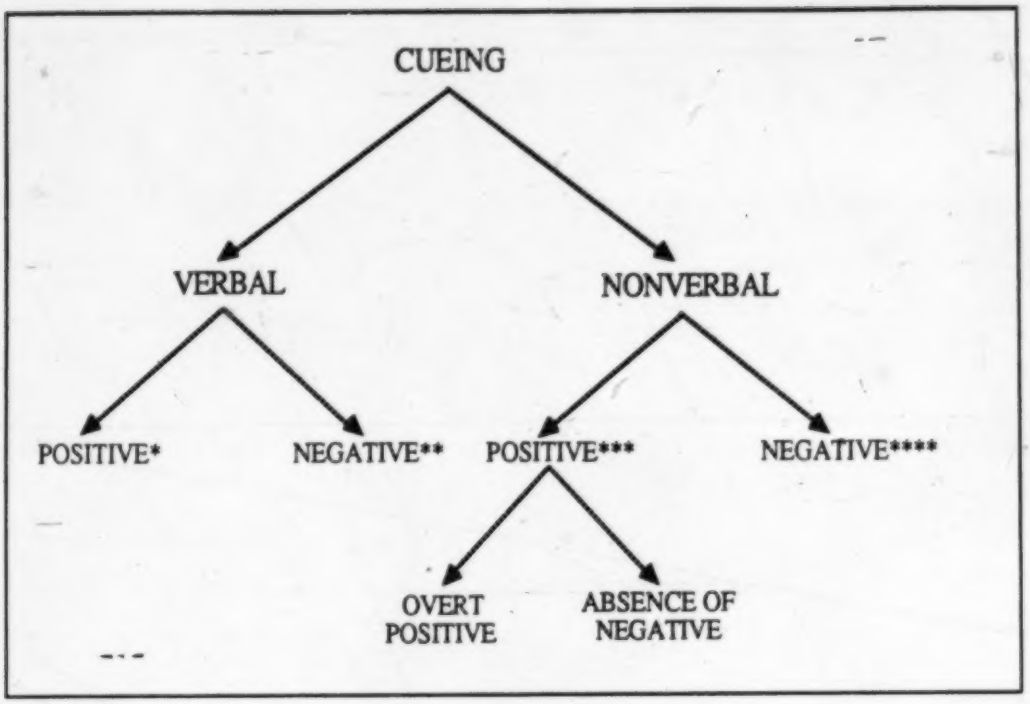
In this chapter the third major group of findings, the process findings, will be presented. The process findings which resulted from the use of the grounded theory method, are summarized in two models. The core variable *cueing* permeates both of these models and their constituent elements and as such will be discussed first. The first model, *The Touching Process* subsumes the processes 'entering' and 'connecting' and will be discussed next. The second model, *Acquiring a Touching Style* subsumes the process, learning to touch and the model *The Touching Process*. It will be discussed in the third section of this chapter. Finally, the findings of the three weeks of fieldwork, during which participant observation was used, will be presented in terms of their contribution to the analysis of the data presented in chapters IV and V.

Cueing

The core variable that emerged from the data was cueing. *Cueing is that process by which, through symbolic interaction with others, one determines the need for, the appropriateness of, anticipates the response to, and evaluates the effect of touch.* Cueing explains the variation in touching styles and patterns of touch that were discussed in the previous chapter. It is a lifelong process that is culturally mediated, and has both personal and professional dimensions. In the personal dimension of cultural mediation, cueing is inextricably bound to the process *learning to touch.* Most of the learning that one does as a child results from cueing. Learning to touch will be discussed in the third section in some detail and suffice to say at this point that learning through cueing seems to be consistent among individuals. That is, these informants were remarkably similar in their descriptions of how and what they learned as children, whether it was about touching or not touching. There was remarkable consistency among the informants regarding how they used cueing to learn about touch in the professional dimension. It is the professional dimension that accounts for the unique patterns of touch that are found in the ICU.

Cueing is dependent on an individual's ability and willingness to interact symbolically, predominately through non-verbal forms of communication--especially one's ability to interpret the non-verbal cues of body language (such as posture, affect, and facial expression). The essence of cueing was captured by this informant's statement: "If they don't seem to display a need for it *verbally or non-verbally* . . . then I probably wouldn't [touch]." The basic elements of cueing are presented in Figure 7, along with informants' examples of 'cues.' This figure, a beginning attempt to represent the complexity and dynamic nature of cueing, illustrates the essentials of what the informants in this study described within their professional context. Non-verbal cues dominate in the professional (nursing) sphere and especially so in the ICU where most patients are so critically ill that they interact in a much 'reduced' way. As well, cues come predominately *from* patients and inform the nurse, although nurses sometimes cue *to* the patient, especially if the nurse is establishing distance between herself and the patient. Non-verbal cues probably dominate in the non-professional sphere as well but this was not explored to any extent in this study. Indeed, cues can be verbal or non-verbal, positive or negative. In the absence of any cue (e.g., from the pavulonized patient) the nurse who uses touch in her practice as a therapeutic strategy will assume that touch is appropriate and desirable and that its effect will be positive. Verbal cues in the ICU are used predominately to determine the appropriateness of, the response to, and the effect of touch. That is, whereas in the outside world the need for touch can be determined by a verbal cue such as "I need a hug," this seems to be absent in the ICU. In fact the determination of a need for touch is accomplished through two mechanisms: non-verbal cueing and the implicit knowledge and belief system of the ICU nurse as discussed in the previous chapter. Hence, the absence of a verbal cue in the ICU is dealt with by utilizing the information received through non-verbal cues and belief systems.

The most dreaded cue is the negative one whether it be verbal or non-verbal. The most sought after cue is the overtly positive one. It is interesting to note that these informants described the absence of a negative cue as being as strong an indicator as the overtly



***Positive verbal cues:**

I need a hug
Thank-you
That felt good

****Negative Verbal cues:**

Don't touch me
I'd rather not be touched

*****Positive nonverbal cues:**

Smiling
Eye contact
Reaching out with hand
Turning toward the nurse
Open facial expression
Leaning toward the nurse
Groping for the nurse
Squeezing nurse's hand
Patient calms after being touched

******Negative nonverbal cues:**

Patient withdraws or turns away f rom nurse's touch
Patient huddles under the linen
Patient swings at or strikes nurs e
Patient clenches fists or tightens body posture
Patient folds arms across chest
Patient frowns
Patient stiffens or tightens up
Patient refuses to make eye contac t or closes eyes
Patient pushes nurse's hand away
Patient brings knees up to chest

Figure 7. The components of cueing.

positive cue. This is likely a reflection of two things. First, many patients in an ICU cannot cue because they are either unconscious or too encumbered by the therapies of the area (e.g., ventilators, artificial airways, multiple lines, medications). Consequently, nurses become accustomed to no response and it becomes normalized so that nurses do not expect a response. Second, these informants indicated that if one believed in touch as a therapeutic tool there is always a basic assumption that the patient would want to be touched particularly since they themselves would want to be. And so they assume that the absence of a negative cue is, in fact, a positive one. The informants said that the family of the patient can provide information in this area by telling the nurse about the patient's preferences, but families rarely discuss a patient's touch preferences with the nurse, just as nurses rarely try to elicit this information.

Thus, cueing is integral to the use of touch. The *use of touch,* whether it be therapeutic or protective in intent, is multi-dimensional. In Chapter IV two major dimensions were discussed, kinds and patterns of touch. They represent respectively the *what and why* and the *who and when* of touch in this study. Cueing and the findings of the next sections represent the *how* of touch, how it is done and how it is learned. However, even in kinds and patterns of touch, cueing is inherent because it is the major active mechanism by which nurses determine when to use what kind of touch and with whom.

The Touching Process

The touching process is presented in Figure 8. It is composed of two sub-processes, *entering* and *connecting*. Cueing enables the nurse to seek and find her way through this process. This process holds true in the ICU for the conscious/alert patient because of the interactive nature of cueing. For the unconscious or non-responsive patient the model is altered such that the circle, which represents the patient's boundary or "bubble" is disturbed, perhaps removed altogether. This boundary may be closer to the ICU patient than it is for the population at large because of the violating nature of an ICU. The removal

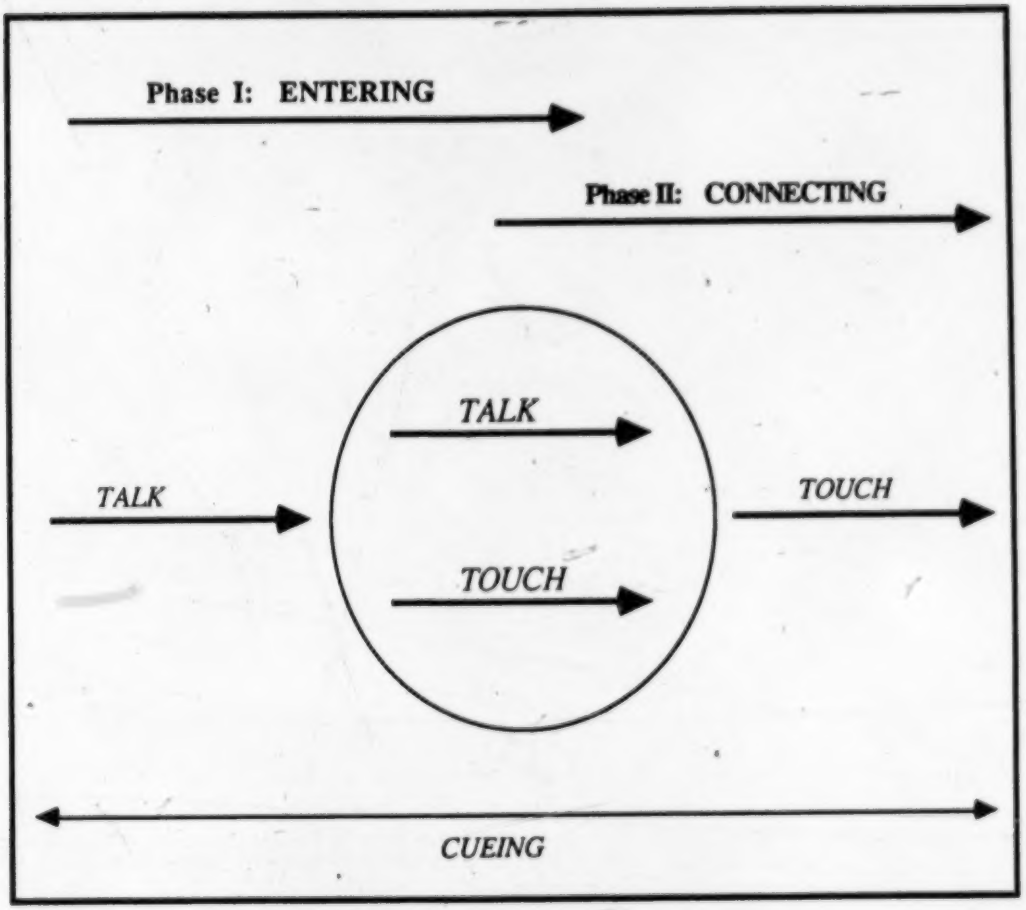


Figure 8. The touching process.

of this boundary alters the process so that although the actual movements of the nurse may look very similar to an observer, the process itself is fundamentally changed. Before discussing this however, the basic process must be explained. The process of touching involves two major phases which are processes unto themselves, entering and connecting.

Entering

Entering, the first phase, is the process by which the nurse gains entry into the patient's personal space, which is delineated by the boundary or barrier that surrounds each individual and protects him or her from the inappropriate violation of the self. To enter, the nurse uses talking much as an *early missile detection system*. This phase serves two purposes. First, it serves to warn the patient that the nurse is making an overture to enter, described by one informant as "cueing him up." Second, the nurse is obtaining information, by cueing about the patient's need for, probable response to, and the propriety of touch. It is characterized by high verbal interaction. Even if the patient is intubated and unable to speak, but alert and able to respond by shaking his or her head and using non-verbal language, the nurse uses talk. In this case, the non-verbal patient cues become paramount. If the patient is non-responsive, disturbances occur in this phase because the nurse is unsure as to whether or not the patient is warned and is unable to cue. Interestingly, this does not always result in the discarding of this phase, rather nurses seem to continue to go through the motions of entering out of first, habit and second, the commonly held belief that patients may be able to hear. This phase, and in fact this entire touching process, holds only for caring touch. The informants made it clear that for better or worse, in the ICU there is no seeking of patient permission to do the activities mandated by protocol, physicians and the physiological needs of the patient beyond a "token" effort. For example, most often the patient is told: "Mr.___, we are going to put a special intravenous in the large vein in your neck now. It will be uncomfortable but it will help us treat you." Or, "Mr.___, I am just going to put this tube down your nose now so that we can keep your stomach empty, is that ok?" This occurs even though there is no intention of

not doing the procedure regardless of whether the patient consents. This is justified by the commonly held belief, in most instances, that the intervention is in the patient's best interests.

The next phase is one of talking and touching. The intent is the same as in the talking phase except that: 1) the nurse has now established that it is all right to progress into this phase, 2) there is an active seeking of permission to enter and touch, and 3) the nurse is now commiting herself to a closer relationship with the patient and, taking a greater risk of rejection as she moves into more and more intimate personal space zones. Consequently, there is more active and complex cueing occurring as the nurse tries to obtain further permission and establishes the beginnings of connection. At this time the nurse has concluded in her mind, that she is willing to interact meaningfully with the patient and expend some emotional energy to establish a connection with the patient. If she is successful in the *connecting* process (discussed below) then she will move into the final phase of the model which is touching.

Connecting

Connecting is the second sub-process in the touching process. It begins in the touch/talk phase which is now intensified and overlaps with entering. The second and final phase of connecting is touching. Touch as it is represented here is more than, but includes, skin to skin contact. It is the gestalt of touch. So that to connect is, metaphorically speaking, to touch and to be touched, much as is conveyed by the *Bell Canada* television commercial's message to "reach out and touch someone." Connecting is a highly individualized and complex process whereby the nurse allows herself to "make patient person" and to care about the patient in a very human way. The inherent risk in the ICU of doing this is that the nurse is now vulnerable to feeling. This feeling can take many forms dependent on the patient's course in the ICU. It can be one of satisfaction and reward and perhaps even of joy, if the patient does well . Doing well can be recovery and discharge from the unit or it can be a peaceful and comfortable death. Feelings can be those that are

usually described as negative or unpleasant in our culture, such as emotional pain, sorrow, anger, and grief. Nurses in an ICU, constantly barraged with the tragedies that can and do befall people and working in a rigorously demanding area are, out of necessity cautious about exposing themselves to potentially draining emotion. Consequently, it is 'easier' for the conscious/alert patient to become connected with the nurse. Having a need to conserve emotional energy the nurse finds it easiest to do so with the non-responsive patient. As well and not insignificantly, the non-responsive patient is unable to provide any feedback to the nurse and is, therefore, much more difficult to 'cue.' The interaction with a non-responsive patient is one-sided and without the element of reciprocity it is difficult to establish any sort of relationship. So that, with this patient two things can occur. First, there is less attention to cueing this patient and a more rapid progression through the touching process, particularly the touching/talking phase, where any efforts at obtaining consent are likely to assure the nurse that she has done all that she can to obtain permission and so, in fact, she is giving *herself* permission to enter. Second, the touch phase of the connecting process is less of a gestalt and more uni-dimensional.

The informants clarified that there were any possible number of 'infractions' of this process. It is possible and does occur especially with non-responsive patients, that the nurse will go directly to an intimate touch with no warning to the patient. Or the nurse can go through the motions with no real intent of actually obtaining or using the information received from the cueing process. Or the nurse, especially if touch is not in her repetoire of therapeutic strategies, can ignore the process all together. The latter probably means that caring touch is not being used at all by this nurse. In addition, the informants made it clear that this process does not necessarily apply to task touch, nor does it apply to distancing touch and applies only minimally to controlling touch. Also, caring touch can be used ineffectively if this process is violated. This is connected to the intimate nature of caring touch and the intimate nature of entering the most personal space of the patient. Nurses are acutely aware of their reactions and the reactions of others (from their personal lives) to

boundary violations and the inappropriate use of even the caring touch. Its effectiveness seems integrally related to consent.

This, then, is the touching process that emerged from the analysis of the data in this study. It seems likely that it is such a *basic social process* (Glaser, 1978) that it holds in everyday interaction. In the ICU, it is modified to cope with the altered cognitive and physical abilities of most patients and the survival needs of nurses. This modification is reflected in first, the increased emphasis on non-verbal cueing and especially the nurse's assumption that the absence of a negative cue is, in fact, a positive cue. Second, it is reflected in the disturbances and alterations that occur in relation to the non-responsive patient.

Acquiring a Touching Style

The process of acquiring a touching style is presented in Figure 9. It is composed of the sub-process *learning to touch* and implicit within it are the complex *patterns* of touch discussed in Chapter IV and the *touching process* discussed above. Implicit also in this model is the maturation process of the individual as a person and as a nurse. The representation is two dimensional and does not adequately reflect the complexities of interaction that exist between and within the different phases or the inherent presence of the patterns and process discussed thus far. It does, however, offer a picture, as a reference point, from which to understand how nurses acquire a touching style. To adequately discuss the Touching Style model it is first necessary to discuss the process "learning to touch."

Learning to Touch

Learning to touch has three phases: cultural background, nursing school and work. Although there is a temporal ordering to these phases, they do not stand in isolation, rather, they form a matrix that is woven throughout a lifetime of social interaction. Each phase will be discussed in turn and then an attempt will be made to integrate this matrix with the implicit patterns of touch and touching process.

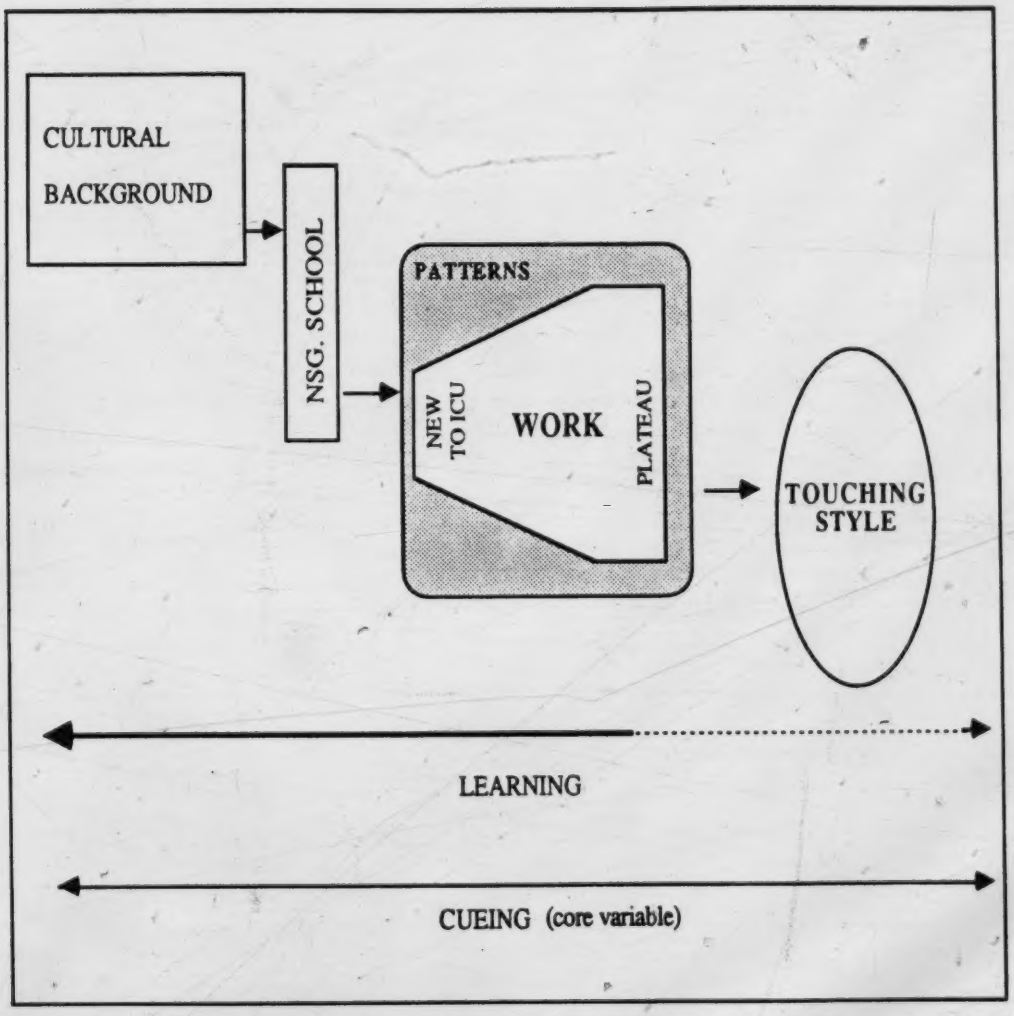


Figure 9. Acquiring a touching style.

Cultural Background

Cultural background is composed of the life experience of the individual nurse, that is, her history. As such, it includes her family, education, religion, socioeconomic status, ethnicity, and social and personal experiences. Inherent within cultural learning is her socialization as a person and the broader cultural beliefs and norms that she has internalized. The nurse brings this with her *as person* to nursing school. Her cultural background moulds, in large part, the native potential with which she and the professional education system has to work. The informants in this study stated that "who" and "what" the nurse was as person was the single most important factor in determining her touching style. And they made it clear that despite the major influence of cultural background that who and what we are is not dictated by cultural background, rather, each of us has a human potential. That potential, and the responsibility incumbent upon each individual to attempt to actualize it was seen as the single most important factor in influencing one's touching style. It must be noted at this point that all of the informants, as discussed in Chapter III, were similar in their cultural backgrounds and came from what many view as the privileged, white, middle class. It is, therefore, not surprising that they shared the commonly held values of the Protestant work ethic.

The elements of cultural background identified by the informants as the most significant in learning to touch were: family, 'street' learning and personal (one on one) experience. Each of these is discussed below.

Family. People learn to touch in the family of orientation by observing, experiencing and cueing (largely non-verbally). In short, by virtue of being present and internalizing the normative patterns of touching for the *particular family unit*. If you come from a "touchy" family where there is much warm, loving touch, you learn to be comfortable with touch, and to incorporate it as part of your behavior without, in many instances, thinking consciously about it. Conversely, if you come from a "non-touchy" family, where there is little or no warm, loving touch, or in some cases "bad" touch, you do not learn to be

comfortable, and in fact may learn to be very uncomfortable with touch. Although the informants agreed that to come from a touchy family was an advantage, those that came from non-touchy families gave the family far less importance in determining touching styles. They pointed out that you could overcome your unease with touching by actively working at touching and learning in other ways to touch. Interestingly, if you come from a very high touch family you may have to modify your touching behavior to conform to the lower (amount) norm of society in general.

The sexualizing of touch begins in the family, for some as they enter adolesence and fathers decrease the amount of touch they give daughters. For others (in non-touchy families) the sexualizing of touch is learned when sexual expression is the only touching situation (albeit an implicit situation). For some, the vehicle of "bad" touch is how they learn not only about the sexualizing of touch, but about how touch can be used to betray the trust of a child. The fundamental associations that individuals make with touch, whether they are sexual, comforting, punitive or depriving are laid in the family of orientation. Further, the values that people absorb in the family influence their later touching patterns. For example, learning to respect the elderly as a child and a young adult can carry over into the nurse's practice in the form of respectful and caring touch with elderly patients. Informants stated that they also learned to touch in their current family (e.g., of marriage). This took the form of increased comfort with touch (both giving and receiving), learned from their partners, and for some, from their children. It seems likely that the converse is also true, that one could learn discomfort with the use of touch if the relationship was destructive.

Street learning. Street learning is the process by which people learn the socially acceptable norms of touch from outside the family and by which they experiment, using trial and error responses (own and others) to touch. Cueing is fundamental to street learning. As children, adolesents, and young adults, people give and receive not only non-verbal, but verbal cues, testing in part the cues learned in the family for validity. It is in this phase of

learning that the sexualizing of touch seems to be cemented. Girls learn that touching other girls is at first acceptable and later, less acceptable. They learn that touching boys is sexually charged. They learn that touch rarely connotes simply comfort. The most acceptable avenue of touch open to them is through sexual activity. Boys learn much the same things although they do not have the latitude of expression with touch that girls do and they seem to connect touch and sex together much more strongly and not necesarily in the same ways that girls do.

Negative cues are well learned in this phase and were clearly remembered by the informants. Street learning can be described as a period of intense study of human behavior (in this case touching). It is a phase that continues throughout life, although the most intense period seems to be in youth and young adulthood. By the later years an established pattern is set and the individual feels less need to identify and learn the societal norms.

Personal experience. Personal experience learning refers to the defined touching experiences that individuals have that serve to alter their touching behaviors. For example one informant described receiving a facial massage (a new experience for her) which she experienced as relaxing and pleasant. She then incorporated this new knowledge into her nursing practice. Similar transference was described with such experiences as foot massages and back rubs. Any new touch experience carries with it the potential for increasing the nurse's awareness of how it feels and, based on this, the potential for it to be incorporated into her practice. It also seems that the reaction of one's close family and friends to new touch experiences serve a similar function. As well, a less potent, but similar effect, can be realized if a friend or family member describes a new and pleasant touch experience. For instance, if a friend or family member tells the nurse that he or she had a *wonderful* foot soak during their hospital stay, the nurse can learn, if she chooses, from this and transfer this information to her own practice, where she will test its validity (through cueing) and its practicability (through her own reaction to its affect on her practice).

One other aspect of personal experience was identified which centers around cross cultural experience. Such that, if a nurse is exposed to a very different cultural touch experience she may choose to incorporate this into her own practice. This seems to take two forms, the first is the realization of how non-touching our culture is in relation to some others, the decision that this is not an inherently good thing, and then the decision that it is "silly" to be so tentative about touch and to use it more. The second form is a heightened awareness of cultural differences and an increased sensitivity to this in patients from different cultural backgrounds so that touch might be increased or decreased depending on the patient's cultural background.

Although cultural learning is much more complex than has been described here, these were its most relevant aspects, identified by the informants in this study. Cultural learning continues throughout one's life, but seems to be most intense, at least in relation to touch, in childhood, adolescence and young adulthood. Although it is not solely determinant of touching style, it is one of the most significant avenues of learning.

Nursing School.

Nursing school stands as a separate phase in the learning process because it demarks professional socialization and the beginnings of enculturation as a nurse. As such it is the first opportunity that the individual has to learn about touch as a nursing strategy. It is represented in Figure 9 (p. 109) with a small rectangle because it appears that this first and potentially rich source of learning, is lacking. Seven of the eight informants stated that they could recall no explicit reference to touch as a nursing strategy during their nursing education. Nor did they believe that their nursing education had indirectly helped them to develop the touching style which they incorporated into their practice. The one informant who did believe that her nursing education had made a difference, described the emphasis on communication, psychosocial aspects of nursing care, and "therapeutic touch" (as it is defined by Krieger, 1975) as increasing her awareness of touch as a nursing strategy *implicitly*. It is likely that nurses learn the beginnings of the tremendous latitude that

society gives them in terms of the human body (including permission to, and an expectation to, touch) in nursing school. It seems that structured education has the potential to impact on touching style because informants, when asked how they learned to touch indicated that one way would be to attend touch workshops. Interestingly, all of the informants seemed to have a desire to formally learn more about touch and viewed participation in this study as one possible avenue of learning.

Work

The work phase is the most intense phase of learning about touch specific to nursing, although the learning that occurs is not restricted to nursing practice, that is, it is transferrable back into one's private life. It is in the work phase that the nurse becomes enculturated as a nurse. Enculturation includes the internalization of the normative patterns of touch within nursing practice. As nurses enter various sub-specialities (sub-cultures) within nursing they undergo further enculturation regarding the ways of being (e.g., an ICU nurse), and relevant to this study, about touching. The most intense period of learning occurs in the "new" phase of work. The new phase occurs, when one first enters the work force, and subsequently when one enters a new area, whether the area is a new location or a new speciality. In Figure 9 (p. 109), the new phase is pictured specific to being new to ICU, which is why it appears as a smaller area. Before addressing this, however, the new to nursing phase must be briefly discussed. This appears to be the most intense period of enculturation in the nurse's career and if it was pictured in Figure 9 it would be a much larger area. Most of the learning that occurs at this time is informal, in that knowledge is obtained in a very unstructured and intuitive way. Listening, observing, role modelling, and "putting self in patient's shoes" are the primary mechanisms of learning and are so implicit that, as one informant stated, it is a process akin to "osmosis." The first major learning experience about touch in the work phase probably occurs here and continues as the nurse encounters various practitioners whom she wishes to exemplify. Often, the informants said that when they had first commenced nursing it was those nurses that they

emulated--those nurses were most often described as knowledgable, competent and caring nurses. From them the informants learned caring behaviors which they believed *likely* included touch.

The "new to ICU" phase is somewhat different, regardless of whether the nurse starts with no nursing experience or with substantial (non ICU) nursing experience. As discussed in the previous chapter, this nurse who is new to the ICU, is so overwhelmed by the knowledge and technical skills which she must master and by the actual environment, she probably does not learn much about touch in the ICU in this initial phase. She will, however, accumulate the beginning repetoire of ICU beliefs which will influence her touching style. As this nurse moves out of the new phase she is better able to learn the norms of behavior in an ICU and she begins to listen, observe, role model and especially to place herself in the patient's "shoes." She will rapidly determine those nurses who she wishes to emulate and learn intensely from them. This learning will include how these nurses interact with patients, including how they touch them. The informants verified this process but could not recall ever explicitly thinking "that nurse is *touching* in a way that I will try." Rather, it was the total behavior of the nurse which the informants recalled, of which touch was, on reflection, a part.

Following a period of time, the ICU nurse 'plateaus' and the work phase of learning to touch decreases. At about the same time the nurse is becoming comfortable in the ICU which seems to be critical to one's ability to use touch effectively. It is after the nurse reaches the comfortable stage that she also becomes susceptible to the effects of routine and boredom, which are for many more difficult to cope with than the tragedies one encounters in an ICU and can adversely affect one's energy level and therefore one's willingness and ability to use caring touch. At this point cueing, which has been an active mechanism all along takes over as the dominant mechanism by which ICU nurses learn how to touch the *individual* patient. That is, from this point on, learning about touch is directed more toward learning about the individual patient than it is about touch in general in the ICU. By this

time the normative pattern of touch is established. Any changes in this pattern are likely to be a result of either the individual nurse's interpersonal experience or a meaningful formal educational event.

The work phase is the most important avenue of learning about touch as a nursing strategy. At some point during this phase learning tapers off and the nurse settles into a pattern and style of touch that is comfortable for her. Learning to touch is a major process within the model *Acquiring a Touching Style*. However to obtain a complete picture of the model requires that the *The Touching Process*, *patterns* of touch, and *maturation* of the individual nurse be placed in configuration with *learning* to touch, such that the model is integrated and the reader is able to capture its matrix nature.

The Integrated Model

The touching style that an ICU nurse uses is the cummulative result of the normative patterns of touch within the ICU. These patterns are determined by the process learning to touch, both in the personal and the professional spheres. The variables that inform the patterns of touch work in an integral manner to also affect the touching process, in that, the decision to touch is a product of these variables, and of the beliefs and values peculiar to the ICU. Once the major active learning of the ICU nurse is complete, specific to touch, one factor remains as potent in its ability to exert a major influence on style, although as discussed, learning is not an isolated process and one continues to learn about touch throughout one's life although in a less intense manner. This factor is the maturation of the individual nurse as a person. The discussion about types of people (Chapter IV) suggested that the majority of nurses were "evolving." This evolving characteristic implies that people grow and change. Intrapersonal change was described as having had the biggest impact on these informants' touching styles once they had become established as experienced ICU nurses and had, consequently, undergone the processes described thus far. Maturation, as these informants described it was a product of age (accumulated life experience) and of the growth and development of self. These exerpts from interviews with one of the informants

reflect the complexity of acquiring a touching style:

> N: I learned to touch through a lot of things you said, through family, through intimate relationships, through positive reinforcement, through touching, through role models, but my comfortableness with touch has come through I think, for me [when] I lost that fear of rejection . . . . it comes with age you know, the older you get, you're not so self conscious about your behavior and you become more sure of yourself . . . I think it's too bad that we don't have more older women in nursing because they are so much more assured and confident in their own self [sic] . . .

Acquiring a touching style, then, is a basic process within which are interwoven other processes and variables which work in interrelationship to form the matrix of dynamics which constitute touching style. Although the 'style' of any given nurse is probably established quite early in her working life it is likely that as the nurse matures this style will also mature. As well, the style that a particular nurse has will be a reflection of the particular cultural system of nursing in which the nurse works, in the case of this study, ICU.

The Fieldwork

As has been discussed in Chapter III, the investigator conducted a three week period of participant observation in the ICU of a large hospital that was not the hospital from which the eight informants were selected. Although the findings of this period of fieldwork were limited, the data collection period did contribute to the analysis of the findings discussed thus far. The most meaningful contributions were: 1) the perspective achieved by the investigator regarding the amount of touch used in ICUs, and 2) the validation of ICU norms of values and beliefs and patterns of touching.

The first contribution was useful in assisting the investigator to maintain a perspective on touch, especially caring touch in the ICU. During the interviews it was easy to think in terms of caring touch occurring on a much more frequent basis than it in reality does. This tendency was there despite the investigators own years of experience in ICU. However, the fieldwork brought to light the relative infrequency with which it is used and helped the investigator to realize that the eight informants were compressing years of work into a few interviews during which they talked almost exclusively about *one* dimension of nursing.

Consequently, it appeared at first as if not only these nurses, but most nurses, used caring touch as a much more constant strategy than is actually so. In addition, the fieldwork validated that caring touch in particular tended to, in the ICU, occur in clusters around the activities that are associated with task touch. There were extended periods during which there was no patient contact. These periods were not evident in the transcripts from the informants' interviews. As well, talking was obviously integrally connected to nearly all touching activity confirming the informants' descriptions of the importance of talk in concert with touch.

The second contribution was valuable in terms of confirming that the analysis of data resulted in the formulation of a taxonomy of the kinds of touch and a pattern of touching that was not unique to the particular unit from which the informants came. For example, nurses in the fieldwork hospital shared many of the same beliefs that the eight informants did. For instance, that it is very difficult to take care of people with self-inflicted problems (overdoses, alcohol related disease, etc.), that exposure to suffering on a repeated basis was "wearing" on the nurse, that most nurses in the ICU thrived on busyness and activity, and that patients with some viable hope of recovery were easier to care for than those with no hope of recovery. The investigator was able to see the effect of infection and subsequent isolation practices on touch insofar as the use of barrier touch increased substantially and there seemed to be less caring touch, perhaps because of the use of gloves. A relatively high frequency of indirect touch was also evident, increasing as the patient was sicker and therefore required more tasks such as suctioning. Busyness was described as one of the factors most likely to determine whether or not the nurse was going to have time to touch in a therapeutic manner. "Liking" the patient was described as an important variable (nurse/patient mesh) in determining whether or not the nurse would use touch.

As well, the investigator 's observations revealed that during very busy times, during cardiac arrests for instance, nursing care focused almost entirely on tasks and activities and the talking during these times was frequently of the giving and receiving of instruction type

and was in several instances 'rote' when directed by nurses toward patients. In fact these observations confirmed that nursing care in the ICU is in many ways dictated by others including the patient as regards their needs at such times. The observations of co-worker touch in the fieldwork were also useful in helping the investigator obtain clarification from the informants regarding its use. Different kinds of touch were also observed (e.g., acquiescing touch during resuscitation efforts which the nurses felt were futile and inhuman, indirect touch, barrier touch, scolding touch, encouraging touch) which assisted in clarification of the taxonomy. However, consistent with what the informants were telling the investigator about the need to consider much more than skin to skin contact in defining and differentiating touches, the investigator had difficulty telling touches apart and in fact many times they could simply not be differentiated. Some of the ability to discriminate between touches appears to remain in the nurse's mind in the form of intent.

The final aspect of the fieldwork that was useful in the analysis of the data was the investigator's reacquaintance with the atmosphere of an ICU. First, the boredom and tedium inherent in the ICU once the nurse has mastered the required skills, was evident. Many shifts consist of repetition after repetition of highly structured tasks at specific intervals. Second, the implicit nature of touch was evident. On a number of occasions the investigator observed nurses carrying out routine activities (e.g., vital signs) that appeared at first glance to not incorporate touch. However, if one observed closely it was possible to see that touch was an implicit part of the activity, often seeming to occur without a conscious awareness on the part of the nurse and to include seemingly incidental skin to skin contact. This skin-to-skin contact very much resembled the warm touch of which the informants spoke. This would be consistent with this touch being easily transferable to tasks. The experienced nurses in this unit seemed to function in an integrated manner. That is, it was often difficult to separate out the numerous things they were accomplishing when doing what looked like a single activity. The investigator's experience in an ICU was the only resource that she was able to use in order to see some of this separation. Another

aspect of the ICU's atmosphere was the presence of families, and the broad range of emotion that they lend to a unit. Interestingly, the most caring touch that the investigator observed was from family to patient, usually in the form of holding the hand or stroking the arm or forehead. All of this served to 'bring back' for the investigator the atmosphere in an ICU, the way it 'feels.' While this experience was counter-productive for the investigator in terms of data collection, it was valuable in bringing back into acute awareness the fact that ICU nurses work in an environment that is technologically sophisticated, frequently dehumanizing, and unforgiving of human error. Most of them, in dealing with death or suffering or boredom or tedium, do not become hardened to their work, rather they care and they do the best that they can on any given day to reach their patients and offer comfort.

All of this served to clarify in the investigator's mind the context within which ICU nurses work, and to differentiate this from the investigator's own experience. There is a reality in ICU nurses' lives which is in sharp contrast to the reality of everyday 'lay' experience. An understanding of this reality was central to treating the analysis of these data with respect and a critical, unrelenting eye in order to present a picture of touch within this reality that was not distorted. This type of analysis was at times frustrating and seemingly unending. It resulted, however, in what the investigator believes is the central finding in this study. That is that touch is a complex gestalt which is poorly understood, but has many dimensions. These have, in part, been presented in these two chapters in the findings, kinds, patterns and processes. The significance of these findings are discussed in Chapter VI.

VI. DISCUSSION

The purpose of this study was to examine touch from the perspective of intensive care nurses. An inductive approach was taken because an analysis of existing research on touch revealed unsubstantiated assumptions, a failure to examine touch considering meaning and context, and significant gaps, one of the most noticable being a virtual absence of information on touching behaviors of nurses. The findings of this study indicate that intensive care nurses touch within a complex configuration of variables, personal meaning, and the norms of the ICU. Further, the findings of the study are suggestive of: 1) touch as a complex gestalt, 2) normative patterns of touching, and 3) identifiable processes, of and related to, touching. Touch is clearly an integral part of nursing practice, and can be a deliberate nursing strategy, the use of which is determined by a myriad of factors.

The purpose of this chapter is to critique the findings of this study in light of existing work on touch. The material is presented within the following structure: 1) critique of the findings, 2) critique of the methods, 3) implications (research and nursing), and 4) summary.

Critique of the Findings

The Conceptualization of Touch

In this study touch was conceptualized as a gestalt. The meaning of gestalt, as it is used in this study, is broader and more comprehensive than Weiss' initial use of the term in 1979:

> In addition to the symbols of the message, all the dimensions of interpersonal touch should be integrated to possess a valid understanding of its effects. Each of these dimensions presents many unanswered questions. . . .These questions represent significant and necessary parts of a total puzzle, without which a complete understanding of the *tactile gestalt* [italics added] and its implications for nursing practice will never occur (p. 79).

Gestalt is defined as: *a structure, configuration, or pattern of physical, biological, or psychological phenomena so integrated as to constitute a functional unit with properties not derivable from its parts in summation* (Webster's New Collegiate Dictionary, 1977). This

implies that the gestalt of touch cannot be understood by simply identifying and describing the constituent parts or dimensions of it. This is congruent with the informants abilities to *describe* different aspects of touch *but* their struggle to *define* it adequately. The aspects that they were able to describe that contributed to an understanding of the dimensions of touch were voice, posture, affect, emotional contact, and context, in addition to the skin-to-skin contact.

There is implicit evidence in the literature that voice, affect and body posture are integral to touch. In their assessment of the effects of touch some investigators have used nonverbal indicators such as facial expression, eye contact, and body movement as measures of the effect of touch (Knable, 1981; Langland & Panicucci, 1980; McCorkle, 1974). Although there is recognition that these dimensions are somehow a part of touch, these investigators have treated them as measures of the effectiveness of touch rather than part of touch itself. The informants' reference to touch as a form of communication is consistent with the commonly held theoretical position discussed in Chapter II. The communication aspects were discussed most often in conjunction with explanations of why touching and talking frequently occur together. Touch was viewed as a more elemental and commonly understood form of communication as well as a 'boost' to the effectiveness of talking. This is consistent with findings reported by Morse (1983) who described touching and talking as integral components of comfort occuring in various ratios depending on situation, context, and client need. Although Morse has proposed that touch is used to comfort, not to communicate comfort, touch as communication is not inconsistent with her proposition. Touch as a form of communication, with the characteristics of increasing the potency of talking, or replacing talking is simply an additional conceptualization of touch in relationship with talking, illustrating two dimensions of a complex gestalt.

Montagu (1986), in his extensive treatment of touch offers a much broader description of touch than has been attempted by other writers, or is reflected in existing research. He includes, for instance, eye contact stating, "Seeing is a form of touching at a distance . . ."

(p. 124). The informants in this study included eye contact as a form of touch, and as a critical indicator in cueing. In this study a definite and substantial emotional component of touch was also identified by the informants. Montagu (1986) states:

> *Touching* is defined as 'the action, or an act, of feeling something with the hand, etc.' The operative word is *feeling*. Although touch itself is not an emotion, its sensory elements induce those neural, glandular, muscular, and mental changes which in combination we call an emotion. Hence touch is not experienced as a simple physical modality, as sensation, but affectively, as emotion (p. 128).

He continues,

> *Emotion, feeling, affect,* and *touch* are scarcely separable from one another. Emotions even when not induced by touch, frequently have a tactile quality about them. As commonly understood, feeling refers to the sensations arising spontaneously within the organism as a whole. One *feels* well or not. The state is an affective one. The larger part of what we call *feeling* appears to be made up of perceptions of complex blends of tactile components drawn mainly from the skin, but also from joint, muscle, and visceral senses (p. 288).

Although, Montagu has been widely referenced since 1971 and his work considered authoritative, investigators have not addressed the emotional component of touch, or developed research designs that would permit it to be elicited. Occasionally quite strong reference to the emotional component of touch can be found in the descriptive nursing literature (see for example Ujehly, 1979), but this does not appear to have been generated from a research base, or to have stimulated researchers to pursue its validity.

There is suggestion in the literature that meaning and context are central to an understanding of touch (Huss, 1977; Weiss, 1979, 1986). The present study was premised on the assumption that context was a critical factor in determining the meaning and expressions of touch. The findings of this study, particularly the touching patterns that were uncovered, support the contention that context is indeed, a critical factor. Jones and Yarbrough (1985) and Morse (1983) report findings that also support contextual factors as critical to understanding the meaning of touch.

A clearer understanding of what touch is could be expected to result from an examination of touch meaning. However, in existing literature, investigators have tended to examine meaning within a narrow and predetermined framework as was discussd in

Chapter II. Exceptions to this are investigators who have taken an inductive or inductive/deductive approach. Jones and Yarbrough (1985), for example, concluded from the results of their study that: 1) touch is not only intrinsically but symbolically significant, and 2) touch had a much wider range of meaning and higher degree of ambiguity than previous research suggested (p. 51-52). Penny (1979) and Birch (1986) who utilized research designs that permitted the subjects, to some degree, describe the meaning of touch as they saw it, offer strong support for the exploration of touch meaning. As previously mentioned, in this study exploration of the meaning of touch resulted in the gestalt conceptualization of touch. This appears to be the first research study to report such a finding--the reference by Weiss (1979) to a tactile gestalt was in her classic theoretical paper.

In research studies using a deductive approach, touch has been defined without fail as some form of physical contact. The findings of this study are strongly indicative of the inadequacy of such a definition. Implicit in traditional definitions of touch is the basic assumption that touch is a phenomenon that is appropriately defined (operationally), as skin to skin contact. This implies that touch is observable and measurable, and that there is, as Weiss (1986) has stated an ". . .inherent assumption that all types of touch carry the same meaning" (p. 496). The result has been a uni-dimensional definition of touch which has fundamentally influenced research design and measurement. This definition of touch, and its failure to include the 'other than physical' dimensions of touch constitutes the main threat to validity of existing research on touch, that is, there is no research base to support the theoretical supposition that touch can be adequately defined as skin to skin contact. There is, in fact, in the findings of this study support for the inclusion of multiple dimensions in any definition of touch, and support for further inductive examination in order to elicit a more complete picture of the touch gestalt.

Kinds of Touch

The findings of this study revealed three kinds of touch: touch to communicate caring

(caring touch), touch to accomplish a task (task touch), and touch to protect (protective touch). These findings bear some strong similarities to existing research and some striking differences. To date, investigators who have distinguished touches (with the exception of Watson (1975) these have all been nurses), have described two groups (kinds) of touch. In the first group, touch has been classified as task (Burnside, 1981), procedural (Clement, 1983; Glick, 1986; Mitchell et al, 1985; Weiss, 1986), or instrumental (Porter et al, 1986; Watson, 1975). Each of these refers to touch used in the execution of required tasks, procedures and activities.

In the second group, touch has been classified as affective (Burnside, 1981; DeWever, 1977), non-procedural (Barnett, 1972b; Mitchell et al, 1985), non-necessary (Barnett, 1972b), expressive (El-Kafass, 1983; Porter et al, 1986; Watson, 1975), comforting (Morse, 1983; Weiss, 1986), or caring (Glick, 1986). Each of these refers to touch that is extraneous to the execution of tasks, relatively spontaneous, and affective. Only Burnside (1981) offers a meaningful definition of affective, although the word appears in most descriptions of this touch. She defines it as ". . . that form of touch which expresses caring, concern, affection, or control . . . . If there is a purpose involved, it is not the performance of some physical nursing task. Rather it is a psychological purpose . . ." (p. 504).

In no instance could this investigator find evidence that these two kinds of touch had been generated using research methods. Rather, it appears they were determined from the respective individuals' own clinical experience and observations. It is evident also that the early work of Watson (1975) was influential in the classification of touch into two kinds. The most important implication from such an approach to the classification of touch is that current research has often relied on theoretical and operational definitions of kinds of touch that cannot be substantiated. Consequently, another significant threat to the validity of existing research on touch is evident.

Caring Touch

The findings of this study resulted in the identification of two kinds of touch, caring and task (see Figure 1, p. 35), that are similar to those found in the literature thus lending beginning empirical support to existing differentiation in the kinds of touch. The caring touch identified in this study is similar to touch that has been described as affective, comforting, expressive, non-procedural, or non-necessary (hereafter called affective touch). Treatment in the literature of this affective touch has been cursory offering little in the way of description or definition. Conversely, in this study a rich description of caring touch emerged. Central concepts in this description are: energy, giving of self, reciprocity, emotional connection, relationship, and ability to see the patient as a person. Caring touch was described as capturing, at least in part, the essence of nursing. At this juncture it is appropriate to briefly discuss the concept of caring as it relates to touch.

Caring has been described as the essence (Leininger, 1984, 1986a) and the "core" of nursing (Roach, 1984). In the past twenty years the systematic investigation of caring within nursing has slowly developed, pioneered by individuals such as Gaut (1983, 1986), Leininger (1981), Roach (1984), and Watson (1979). Examination of the caring literature revealed that touch has been identified as a construct of caring (Leininger, 1981), and as a caring behavior or action (Gaut, 1983; Mayer, 1986; Wolf, 1986). Although touch has received little attention by investigators studying caring, these reports are suggestive of touch as one expression of caring. In 1984 Roach discussed caring as the motivating force in the choice of nursing as a career. She further suggested that caring was a human mode of being and was not unique *to* nursing, but rather, *in* nursing (p. 12). In 1983 Morse posited that comfort was the major instrument for care, that empathy and touch were the two main components of comfort, and that caring provided the motivation for nurses to nurse. This investigator posits that touch and talk are the two main components of comfort, constituting vehicles of its expression. Empathy, rather than a component of comfort, is the subjective awareness that nurses experience when the caring motivation is mobilized through the action

of comforting. Comfort, then, may be posited as the instrument by which caring is uniquely expressed within nursing. It follows that touch, a significant component of comfort, is also, potentially, a unique expression of caring within nursing.

Two factors are essential to the use of caring touch. The first of these is the presence of the caring motivation, and the requisite knowledge and skills to identify and act on the comforting needs of patients. The second factor identified in this study is the requisite energy to touch (the *energy factor*). Although, a considerable amount has been written on caring and some has been written on the caring motivation, no materials were located that dealt with the energy requirements of caring, or of touch. Adequate energy (physical and emotional) is so important that without it nurses cannot use caring touch. Other expressions of caring (e.g., talking) appear to require less energy, and therefore to be sustained longer under energy depleting conditions, but neither can these be sustained indefinitely. One conceivable explanation for the absence of the *energy factor* in the literature is that touch has not been studied as a vehicle of comfort, comfort has not been studied as an instrument of caring, and caring has not been studied systematically specific to its mobilization.

The findings of this study revealed comforting touch and encouraging touch as major sub-seggregates of caring touch. Four studies that utilized an inductive or an inductive/deductive approach reported findings that support the identification of these sub-seggregates. Morse's (1983) ethnoscientific analysis of comfort, in which she reports touch to be a major seggregate of comfort, offers the strongest support for a comforting kind of touch. Two investigators (Birch, 1986; Penny, 1979) report comfort and encouragement as two significant meanings of touch to women during labor and delivery. Jones and Yarbrough's (1985) findings included two major seggregates of touch meaning, positive affect and playful, that bear some interesting similarities to the findings of this study. Subsumed within positive affect are the sub-seggregates: support, appreciation, inclusion, sexual, and affection. Their category of support is closely aligned to the types of touch (consoling, supportive, reassuring) within the comforting sub-seggregate in this

study, with some overlap into encouraging (reassuring):

> Support touch serves to nurture, reassure, or promise protection. In general, such touches show concern for another who is experiencing distress. Typical translations include "consoling," "It's OK," and "Let me take care of you.". . . .Support touches generally occur in situations which either virtually require or make it clearly preferrable that one person give comfort or reassurance to another (Jones & Yarbrough, 1985, p. 37).

The affection category appears, from their descriptions, to align with the "loving" and "warm" touches of the comforting sub-seggregate in this study. The playful category in their work is closely aligned with the encouraging touches, "spirit-raising" and "fun/happy." The findings of Jones and Yarbrough are of particular relevance because their study design, although different from the one used in this study, is similar, and as well, their intent to examine touch with attention to meaning and context is similar. It is interesting to note the similarities given that their study was conducted in the context of everyday experience, and this study was conducted using informants from an intensive care unit.

The investigator could find no literature, descriptive or investigative, that offered descriptions of the characteristics of comforting and encouraging touch, other than those found in Jones and Yarbrough (1985). The findings of this study, however, did provide such descriptions. Some support for the activities that these informants indicated constituted 'pure' caring touch can be found in DeWever's (1977) study, where she operationalized affective touch by delineating seven activities (e.g., holding hands) that closely ressemble the activities (expressive of caring touch) reported in Chapter IV. The findings of this study also suggest that caring touch is not unnecessary. This contradicts the use of the term non-necessary by Barnett (1972b) in describing the affective touches. While it appears that the use of non-necessary may have been intended primarily to denote touch unnecessary to the completion of procedural duties, the use of the term does connote affective or caring touch as being less important.

Task Touch

The task touch identified in this study is similar to touch that has been described as task,

procedural, and instrumental (hereafter called task). Although there has been some investigation of the frequencies of task versus non-task touch (Mitchell et al, 1985; Watson, 1975), and subsequent reports that task touch is used more often, no studies were located that, in fact, explored task touch. Consequently, it appears that this study is the first to report substantive findings on task touch. The sub-seggregates, working and controlling, and the attendant types of touch subsumed within these sub-seggregates (see Figure 1, p. 35) constitute task touch. Since the five types of working touch have not been identified before it is impossible to critique this finding in light of the literature. It is possible, however, to draw implications for practice and research, and this is done in a later section.

Controlling touch is described briefly in the literature, but not as a type of task touch (except by Weiss, 1986). Pratt and Mason (1984) report the need ". . . to include a category implying restraint or control." (p. 1087). Weiss (1986) in her description of procedural touch stated: "Such touch is usually directive and controlling . . ." (p. 496). Jones and Yarbrough (1985) report a category of control touches that ". . . serve to direct the behavior, attitude, or feeling state of the recipient." (p. 41), and report three meanings within the category, compliance, attention getting, and announcing a response. The compliance meaning is the closest in meaning to the sub-seggregate of controlling touch in this study. As well, they report that "Verbalization occurs in a preponderance of the cases . . ." (p. 42) which is consistent with the findings of this study, particularly those concerning "scolding" and "commanding" touch. Controlling aspects of touch are implicit and explicit in the work of such investigators as Henley (1973, 1977) and Summerhayes and Suchner (1978) specific to gender relationships, but have not been studied within nursing.

In this study the need for control in the ICU was identified by the informants as fundamental to desired patient outcomes, and the nurse's ability to function efficiently, and meet role expectations as they exist in modern ICUs. This need for control appears to be unrecognized in current literature, and may constitute a primary source of the "bad" feelings that the informants described result from the use of some of the controlling touches. One of

modern nursings' concerns is with reciprocal nurse-patient relationships, and with advocating the participatory and decision making rights of patients. However, the unique nature and characteristics of the ICU, although they have been described, have not been thoroughly examined in terms of how they affect patient participation and nurse coercion. The reality of control as inherent and essential to an ICU has not been studied, and the question can be raised, does the ICU nurse experience "bad" feelings as a result of using some of the controlling touches because she has not been taught that they are in some areas, and in many situations neeessary? That is, do nurses experience a conflict between what they believe a good nurse ought to do, and what experience tells them they must do?

It seems that task touch has been largely ignored and considered only in terms of the ratio of frequency of task to non-task touch. The implicit message in study reports is that task touch is less important, and that it is somehow 'wrong' that nurses use more task than caring touch. The findings of this study contradict such an implicit message. At least in the ICU, (and probably in many nursing contexts), task touch, by virtue of the "work" of nursing accounts for the majority of nurse-patient contact. This is not 'right' or 'wrong,' it is simply a reflection of the nature of the ICU. Further, this investigator posits that task touch, because it is potentially "neutral", (i.e., it can be 'flavored'), and by virtue of its high frequency, may be, in fact, the most important touch in *practical* terms, in the ICU. Given that nurses have the potential in many cases to determine whether a task is positively or negatively experienced by the patient, it would seem that it should be given more careful attention. The findings of Mayer (1986) support the importance of task touch. She reported, in her study of perceptions of caring behaviors, that patients valued instrumental behaviors more, whereas nurses valued expressive behaviors more. By 'flavoring' task touch with caring touch both instrumental and expressive behaviors could merge, satisfying patient and nurse expectations.

Protective Touch

The third kind of touch identified in this study, protective touch, has not been

previously reported. The only reference to protective touch located was in Cashar and Dixon's (1967) paper which was based on clinical observations in psychiatric nursing settings. In it they refer to touch to protect ". . . one's self or others from injury or destruction by use of manual restraint." (p.448). Indirect references to protective touch can be found in two sources. First, as was discussed in Chapter II, some investigators have reported negative effects of touch, implying that there is a "negative touch." The informants in this study frequently referred to protective touch as negative. Second, there are admonitions in the descriptive literature (Burnside, 1981; Goodykoontz, 1979; Johnson, 1965; Tobiason, 1981; Ujehly, 1979) to use touch cautiously, considering patients' cultural backgrounds, personal experiences, and situations, all of which influence the propriety and potential response to touch. These references do not, however, assist in the interpretation of the findings regarding protective touch in this study.

The absence of any treatment of protective touch in the literature has at least three possible sources. First, as was discussed earlier, the concept of touch is poorly understood and there is no research base to support existing definitions of touch. Consequently, research has been conducted using definitions that in all likelihood do not capture this (protective) dimension of touch. Second, existing research has been conducted using predominately deductive designs. This, in combination with the positivity bias discussed earlier, has resulted in research designs that have not permitted the elicitation of this kind of touch. Third, this touch is the antithesis of caring touch. Nurse authors/investigators may be reticent to explore an aspect of nurses' behavior (i.e., non-caring touch) that conflicts with commonly held values and beliefs about the essence of nursing.

Protective touch has two sub-seggregates, controlling and distancing. The protection inherent in this touch can be either for the patient (physical protection), or for the nurse (physical and/or emotional protection). The physically protective touch is straight forward and not difficult to understand. There are, however, some pointed nursing implications which are discussed in the implications section. The emotionally protective touch, on the

other hand, is more complex and merits some discussion.

The findings of this study indicate that nurses use protective touch for at least two reasons: 1) to distance (i.e., protect) themselves from emotional pain, which is closely connected to protecting emotional energy reserves, and 2) to release tension. There are no references in the literature to touch as a method used to protect the nurse from emotional pain, or to release tension. Consequently, this finding represents new information, and related literature must be turned to for support. The investigator suggests that the first of these reasons (protection from emotional pain) is integral to the concept of suffering. Suffering is not comprehensively defined in the literature (Battenfield, 1984), but appears to be intimately connected to loss (Baker & Keller, 1978 cited in Battenfield, 1984; Kubler-Ross, 1969). Hay and Oken (1972) writing on the stresses of intensive care nursing stated: "The threat of object-loss is pervasive. The nurse simply must protect herself--from grief, anxiety, guilt, rage, exhausted overcommittment, overstimulation and all the rest. She has no physical escape. But she can avoid, or at least attenuate, the meaning and emotional impact of her work" (p. 114). Hutchinson (1984) reporting the findings of her study in a neonatal ICU stated: "Nurses combat the horror of their situation by 'creating meaning,' an active process requiring an expenditure of psychological energy by the nurses" (p. 87). One can argue that nurses working in intensive care units, faced with repeated loss and "horror" must deal repeatedly with actual and potential suffering. Hutchinson has postulated that nurses do this by searching for meaning in three spheres, the emotional, the technical, and the rational. The search for meaning, in order to deal with suffering is well described by Victor Frankl (1963). This investigator suggests that when nurses are unable to create meaning in the three spheres Hutchinson describes, particularly, the emotional, that one of the possible outcomes is the use of touch to create distance, by separating. Although, Hutchinson describes separating as something that should happen to counterbalance attaching, the separation that occurs with touch to create distance while it serves a critical function, is probably not balanced appropriately with attachment. It is also

interesting to note that Hutchinson refers to an emotional energy expenditure, and while she is not referring to touch, it seems plausible that this may be consistent with the energy factor described earlier in relation to touch.

The second reason suggested for the use of protective touch, release of tension, appears to be a unique finding. It is a product of the increasing accumulation of anger, frustration, and probably loss of control. As such, it has pertinent implications in the understanding of abusive touch. Harsh and severe touches, are likely precursors to abusive touch, and consequently to one form of violence in the ICU. The touch resulting from a need to release tension brings with it such strong feelings that informants in many instances were not aware of tension release, making it a potentially more insidious, and therefore perilous behavior.

Three kinds of touch were identified in this study. Two of them, caring and task bear some similarity to the affective and task touch previously identified in the literature. Their identification from a research base lends support to previously unsubstantiated classifications, and adds substantially to their understanding. Protective touch is a distinct kind of touch that cannot be combined with caring touch into an 'affective' seggregate. Informants clearly stated that one could combine caring and task touch, or protective and task touch, but that caring and protective were mutually exclusive. This protective touch finding is new and significant in two respects. First, there are at least three kinds of touch. Second, the description of various aspects of protective touch increases our understanding of other dimensions of the touch gestalt.

Patterns of Touch

This study is the first to report findings that reveal normative patterns of touching. Further, the findings support the premise that context is a critical factor. In the case of this study, the patterns represent norms of touching for intensive care nurses. Although, there have been studies that addressed variables thought to be determinant of touching behavior, and a very few studies that have specifically addressed touching behaviors of nurses, the results of these studies have not been descriptive of touching norms. Uni-dimensional

definitions of touch have been employed, and *a priori* decisions made to examine only select variables and in isolation from other potential variables. Given the complex and highly interactive patterns discovered in this study, it is not surprising that studies utilizing such designs, and not done within a cultural context have failed to be more informative.

The major variables that have been studied include personality, sex, and gender/status by behavioral scientists, and age, sex, race, diagnostic group, severity of illness, and level of consciousness (LOC) by nurses. These variables most frequently are studied in the recipient of touch (i.e., the patient) and the the last three variables listed are always patient variables. The major groups of variables identified in this study were nurse variables, daily (contextual) variables, and patient variables (see Figure 2, p. 73). Subsumed within each of these three groups were a complex array of individual variables.

Other than the generally accepted belief discussed in Chapter II, that culture is a major determinant of touching behavior, and an implicit inference drawn from the touch and personality variable studies, there do not appear to be any reports of findings ressembling those of the nurse variable section presented in Chapter IV. In the descriptive nursing literature mention of an individual's background and personal experience as factors in touching can sometimes be found. The descriptions of types of people and types of nurses specific to styles of touching appears to be new. Nurses' sex and race did not emerge as a variable in this study, possibly because all of the informants were female and white, and information specific to male nurses and ethnic groups was not actively sought. Age emerged, indirectly in terms of the growth and maturation factor. The types of people and nurses, when considered in conjunction with the *learning to touch* process (presented in Chapter V) represents a potentially rich source of information concerning the nurse factor in touch with some interesting implications for practice and education.

One nurse variable, burn out, stands apart as being particularly potent in its ability to influence patterns of touch, so potent, in fact, that generally speaking it appears to override most other factors. Although there is considerable variation, in the burnout and related

literature, concerning adequate theoretical definitions of burnout, certain consistencies are evident. Almost without fail definitions of burnout include such terms as: fatigue (Freudenberger, 1974; Harris, 1984), physical and/or emotional exhaustion (Clark, 1980; Maslach, 1978, 1982; Rich & Rich, 1987), detachment (Maslach, 1976, 1978; Vachon, 1983), and distancing (Harris, 1984; Wimbush, 1983). As well, Melia (1977) used the term "combat exhaustion" in describing ICU nurses, and Reichle (1975) described the extraordinarily high energy requirements demanded for emotional survival of the ICU nurse. However, no references were located on the effect of burnout on touch, although it could be implied from Maslach's (1976) reference to individuals' requirement to create physical distance when they are burned out, that a decrease in touch could be expected. The process of burn out as described by the informants in this study was presented in Figure 3 (p. 78). The mechanism of its effect on touch appears to be almost entirely related to the energy factor required to touch, and the converse energy depletion of the burned out nurse. The disengagement that occurs with burnout is also inconsistent with the intimate and giving nature of the caring touch. The increased use of the protective touches that can occur with burnout would be consistent with the distancing and depersonalizing processes that are said to occur with burnout (Maslach, 1978; Harris, 1984) and with what is occasionally referred to as an increased concern with machines and a decreased concern with human qualities (Harris, 1984; Noble, 1979). This is congruent with the ICU nurses' need to protect herself from emotional pain that was discussed earlier in this chapter, for example, both Anderson and Basteyns (1981) and Huckabay and Jagla (1979) reported that nurses ranked the death of a patient to be one of the most stressful events in the ICU.

Daily (contextual) variables (see Figure 2, p. 73) influencing touching style have not been studied. The only reference to such variables was found in El-Kafass' (1983) study where she reported that the number of pieces of equipment in the patient's ICU room correlated at a statistically significant level with an increased frequency of touch. The implicaton may be that the more equipment there is in a patient's room, the busier that

particular area is, and therefore the more nurses will use touch. The findings of this study suggest that daily unit variables are more complex than this, and interact with other variables to determine touching style (including frequency). The daily nurse, and daily nurse/patient variables have not been reported to date in existing research although, it could be inferred from the burnout and related literature that the daily nurse variable, "tired that day," would have a significant impact on touch.

The patient variables represent the largest category of variables in this study. Patient (or client) variables account for the majority of the touch variable research that has been done to date. The nursing research done in this area is the only research that is applicable to the present study, and so will be the only research addressed. As well, most of the findings bearing any relevance to this study are found in El-Kafass (1983) and Clement (1983). Earlier studies that discussed such findings as age and severity of illness suffered from design problems that bring into question some of the conclusions drawn in the study reports. Two weaknesses arise in this literature. First, is the dearth of studies conducted in health care contexts. Second, perhaps because there are so few studies, investigators appear to have accepted the designs employed in the initial studies as the most appropriate for an examination of touching behaviors. Further, the results obtained have not always been critically examined in terms of why they have not been significant, or more critically, if significance was obtained, would the study have been meaningful?

El-Kafass (1983) and Clement (1983) found no significant statistical correlations between patient age, sex, or race and the dependent measures of frequency, location, and duration of touch. In light of the findings of this study, this is not surprising. First, the question has been raised as to whether touch can validly be measured by observation or defined as skin to skin contact. In fact, the findings of this study indicate neither is true. Second, the complex array of patient variables identified in this study, and their interactive nature suggest that one variable does not act alone to determine frequency, location, and duration of touch. El-Kafass reports that the sicker a patient is, and the more depressed

their LOC, the higher the frequency of touch. Clement reports that diagnostic category is a significant variable (i.e., orthopedic patients received more touch). Clement further reports that the more procedural touch a patient receives, the more non-procedural touch a patient is likely to receive. This investigator suggests that in both of these studies that the investigators may have been capturing a number of other variables in the categories that were significant. More importantly, this investigator suggests that such studies have been premature because not enough has been known to adequately determine appropriate dependent and independent variables. In this study three clear categories of patient variables influencing patterns of touch were identified: facilitators (see Figure 4, p. 86), inhibitors (see Figure 5, p. 90), and a mixed category (see Figue 6, p. 95). It seems reasonable to postulate that if the individual variables within these categories were studied that investigators might obtain results that were more satisfactory in terms of statistically significant results. However, the more serious question must then be raised as to the value of repeatedly measuring frequency and location of touch and correlating these with patient and nurse characteristics. These studies have not, and cannot begin to uncover cultural norms regarding touching. Patterns of touch can be validly determined, as has been demonstrated in this study, using inductive approaches--in fact, this may be the only method of understanding cultural norms. The *value* of understanding normative patterns of touch is discussed in the implications section. Further, studies that report who touches whom, where, and how often do not address touch meaning, the therapeutic or non-therapeutic effects of touch on patients and/or nurses, or patients' perceptions of the touch experience, all of which are important to a qualitative understanding of the use of touch in nursing practice.

The patterns of touch that resulted from the findings of this study inform us as to the variables that affect the touching style of intensive care nurses. Touching style, has not been referred to in the literature except by Weiss, and then only briefly: "If caregivers hold in their minds the intent of the touch as being strictly procedural, a certain *style* [italics

added] of touch may result, one which communicates efficient performance of technical skills, but little attention to the human needs of the patient" (1986, p. 497). The implications of her statement go beyond lending support for the existence and importance of style, and relate back to the finding in Chapter IV regarding the intent of the nurse and its importance, not only in terms of being crucial in discriminating between touches, but crucial, as well, in the meaning conveyed to the patient. Touching style is an elaborate construct involving touch variables, belief and value systems, learned behaviors, intuition, and the interplay of several processes.

The Processes of Touch

The process findings of this study appear to represent new information on touch. No literature, descriptive or investigative, was located that addressed the processes by which individuals learn to touch, acquire a touching style, or in fact, actually touch. Two nurse investigators have proposed theoretical frameworks within which are implicit references to processes of touch. Weiss proposed a model of "factors influencing the effect of caregiver touch on incidence of dysrhythmia" (1986, p. 496) which suggests that physical characteristics and intent of caregiver touch function in combination with patients' previous tactile experience, attitudes toward touch, health status, and somatosensory system, to determine the cardiac response of patients to touch. Pepler proposed a theoretical framework of "concepts related to touch as comforting" (1984, p. 13) which suggests five sequential phases with feedback mechanisms: patient behavior, nurse behavior, nurse-patient interaction, patient response, and nurse response. As well, she discusses the concepts of congruence, empathy, mutual understanding, security, and propriety as integral to her proposed framework. The *how* of touch appears not to have been studied except tangentially, or in the case of Pepler relative to her theoretical framework. The reasons for this are probably multiple, but one can posit that the two factors identified earlier in this chapter, poor understanding of the concept of touch and deductive research design, account, in part at least, for this. The virtual absence of inductive inquiry into touch has meant that

investigators have not utilized methods suited to revealing previously unknown information, or to the elicitation of process. Generally speaking, investigators appear not to have asked such questions as, is touching a process? How do people touch? How do people learn to touch? How do people determine the propriety of touch? Certainly within nursing (with the exceptions noted above) there is little evidence that investigators have asked such questions, or examined the variations that might occur with health deviations, such as altered LOC. This is unusual given the societal permission that nurses are granted in terms of touch, the central role of touch in nursing practice, and the paucity of knowledge about touch in nursing practice.

Although findings similar to those of this study have not been reported before, related literature was located on three dimensions: cueing, personal space, and learning to touch. Each of these merits some consideration, and is discussed below.

Cueing

Cueing as a process integral to touching has not been reported. However, studies that report using verbal, and in particular, non-verbal behaviors, such as, facial expression, eye contact, body movement (Knable, 1981; Langland & Panicucci, 1980; McCorkle, 1974) are suggestive of these behaviors as "cues" to the effectiveness of touch. The effectiveness of touch is one aspect of the definition of cueing (see p. 100). Second, two recent studies on intuition in nursing discuss the use of "cues." Young (1987) states: "Cues represent the information that the nurses used to make a decision and range from subjective feeling cues to objective physical signs." (p. 55). Schraeder and Fischer (1987) identify perception of cues by nurses as one of four factors in intuitive knowledge. From these two sources the following inferences can be drawn: 1) the validity of the cues identified in this study is supported in the literature, 2) the identification of cues (i.e., cueing) may be a more general and pervasive process than is presently recognized, that is, not limited to touching, and 3) intuitive knowledge and decision making may be one dimension of cueing. Although, the informants in this study often had difficulty articulating how they were able to determine the

appropriate use of touch, with persistent effort, they were able to clearly identify specific cues (see Figure 7, p. 102). One of the reasons that the intuitive dimensions of touching may not have been studied is the historical devaluation of intuitive knowledge which is often viewed as more primitive and consequently less valuable than 'objective' knowledge (Belenky, Clinchy, Goldbeyer, & Tarule, 1986).

Personal Space

Personal space is an intrinsic dimension of the touching process (see Figure 8, p. 104). Informants were acutely aware of patients' personal space, which they often referred to as a "bubble" or boundary. Personal space has been defined by Hayduk (1983) as ". . . the area individuals maintain around themselves into which others cannot intrude without arousing discomfort." (p. 293). He describes the frequent use of the term "bubble" but suggests the analogy is inadequate. Hayduk's (1983) extensive review of over 400 studies concerned with personal space thoroughly documents the major theoretical positions, the variables salient to the concept, and the methodological and measurement problems of current research. It is obvious, with any acquaintance with the proxemic literature, that personal space is a significant dimension of the touching process. Consequently, it is not surprising that it emerged as an important dimension of the model developed from the findings of this study. In fact, any touching model that did not include a personal space dimension could be said to be invalid. The aspects of the touching model (see Figure 8, p. 104) that are particularly salient to nursing, and to ICU nursing are: the apparent integrity of the model with respect to caring touch, the violations that occur with task and protective touch, the issue of permission or consent, and the suggestion that the personal space of ICU patients may "shrink" or change in some manner due to the violative nature of the ICU.

Learning to Touch

Although, the process by which nurses (or people) learn to touch has not been described, there is support for some dimensions of this process, particularly cultural background. As was discussed in Chapter II, culture is well established as a major

determinant of touching behavior. However, specific cultural dimensions are not well described (e.g., family, street learning, personal experience). Often culture is discussed cross-culturally, rather than by comparing sub-cultures. The sexualizing of touch is inferred by the preponderance of studies done in the behavioral sciences (see, for example, reviews by Major, 1981; Steir and Hall, 1984 and the work of Henley, 1977). Taboos in psychotherapy which center around the sexual connotations of touch were described in Chapter II. However, the *process* by which touch has been sexualized in our culture has not been well described, or described within a socio-political context. Surprisingly, the incest literature, where one might expect to find reference to the sexualizing and inappropriate use of touch does not directly address touch. Even the more recent and feminist work of such individuals as Rush (1980) and Ward (1984) does not include direct reference to touch. Interestingly, one of the more fruitful sources of reference to touch in this context is the recent children's literature on the appropriate use of touch (see, for example, Freeman, 1982, 1986). The frequency with which sexualized touch appeared in this study suggests that the sexualizing of touch is a significant area of study with implications for nursing.

The role of nursing school in learning to touch is referred to by Older (1982) in a positive manner, but the findings of this study do not support it as an explicit source of learning. It may be that informants did not recall their nursing education clearly, or that for seven of eight informants their educational experience in nursing was sufficiently old that touch was not incorporated. It is also possible that nursing education is inadequate in this area, although the small sample size in this study precludes such a generalization.

No reference to the work phase of learning (see Figure 9, p. 109) was located. The mechanisms the informants described using in this phase (role modelling, observing, listening, putting self in patient's shoes) were likened to "osmosis." This is similar to aspects of the intuition studies cited earlier, and to the work of Benner (1984). It seems plausible that such "informal" learning is the primary mechanism by which nurses learn to

use touch as a *nursing* strategy.

These process findings add substantively to a beginning understanding of *how* nurses touch. It seems obvious that this dimension is essential to a more complete understanding of touch. An analogy can be drawn between touch and myocardial infarctions (MIs). If we understand first, the kinds of MIs, and second, the factors or variables that cause MIs and influence their course, but do not understand the mechanism of MIs (i.e., the normal function of the heart and the process of an infarct*ing* heart), then the first two are of little use. We are left unable to comprehend or treat the pathophysiology of the heart. This investigator suggests that, while it is crucial to understand the kinds of touch and the variables that affect patterns of touching, it is also crucial to understand the mechanism of touching. If we do not, then it is impossible to determine the *normal* use of touch, or to detect aberrancies in its use. If touching is a primitive and a potent human act, if touching is central to nursing practice, and if its effects can be positive, neutral, or negative, then it is essential that the mechanism of touch be understood. Further, an understanding of the processes of touching and acquiring a touching style would assist in the clarification of some of the existing conflicts in the literature, and identification of variables that affect these proceses, as well as, patterns of touch, that to date have not been examined.

Since many of the findings in this study have not been previously reported or discussed in the literature, the question must be raised--how do they contribute to existing knowledge on touch? First, they contribute substantially by addressing the nurse. The nurse has been virtually absent from the touch equation in existing research. Second, the findings have the potential to contribute to the development of a theory of touch by adding to existing work in nursing on touch, namely that of Weiss (1986) and Pepler (1984). Third, the findings of this study reinforce the value of systematically examining behaviors that have been taken for granted because they are so much a part of everyday practice and seeming common sense.

Critique of the Methods

Methods

Ethnoscience is a linguistic technique that is premised on semantic principles. As such, from the beginning it was anticipated, consistent with Morse's (1983) report on the difficulty she experienced, that there might be some difficulty using it to study a nonverbal behavior. The informants had only one word for touch. It was very difficult for them to try and find descriptors for different kinds of touch that adequately reflected the meaning they wanted to convey. As well, they experienced a great deal of difficulty trying to draw knowledge, that was fundamentally implicit and integrated, into the explicit realm. This was evident in the informants' frustration, long silences, search for words and statements that it was sometimes difficult, if not impossible to name different touches. The result of this process was first, that the analysis was tedious and lengthy for the investigator, second, that descriptive phrases are sometimes used in the taxonomy, and third, that the findings did not all lend themselves to taxonomic classification. The patterns of touch were more appropriately represented in a model with accompanying textual description. Although, ethnoscience was valuable in providing a systematic method of eliciting the cognitive aspects of implicit cultural knowledge and norms, it did prove to be problematic when applied to the study of a nonverbal behavior.

Ethnography as it has been defined and conducted by Spradley (1970, 1979) includes both traditional ethnographic methods and ethnoscience. This approach was considered potentially fruitful, in that the affective dimensions of touch (e.g., meaning) could also be elicited. Ethnography encompasses a wide range of techniques, as well as, affording considerable design flexibility. This flexibility, combined with the cultural orientation of ethnography, and the *feeling* dimension it is possible to elicit, were the major strengths of the method. A limitation of both ethnography and ethnoscience in this study, and potentially in other studies, is the inability to deal effectively with process data. Conceivably, if the researcher confined him/herself to these methods, potential processes

might remain undetected.

The value of grounded theory to the analysis of this study was that it offered a way to *think* about process data. It was at the level of conceptualization that grounded theory was critical to the investigator's attempts to determine where the analysis of this data fit into the overall scheme. Some of the techniques that Glaser (1978) suggests were consciously not used in this study (e.g., searching for negative cases). The use of these techniques in future studies would contribute to a more complete understanding of touch processes.

Techniques

Interviewing

Ethnographic interviewing was the major data collection technique in this study. It proved to be an appropriate and rich source of data. The use of unstructured interviews made it possible to conceptualize touch in a broad manner, incorporating dimensions that had not, to date, been reported. One of the most useful techniques was the card sort. Informants described it as enjoyable and the conversation that occured during the sorting was invaluable. In retrospect, informants were probably given too many cards to sort, despite the decision to divide the card sorting between two interviews. It also became apparent that it was crucial to attempt to schedule interviews when informants were rested, as they found it exhausting to concentrate intensely on making explicit, something that was so implicit for most of them. For some of the informants it was also emotionally tiring to discuss something that brought forth intense feelings. It would also have been useful to schedule interviews closer together, to begin constructing the taxonomy of kinds of touch earlier, and to have begun writing sooner. In retrospect four to six informants would have been sufficient as there was some data repetition with eight informants. Finally, the group interview was one of the most valuable processes in the study. In the future, the investigator would consider this in the original design and make a concerted effort to incorporate it. The group interview seemed to stimulate more critical thinking and comment from the participants than some of them had evidenced previously. Two factors have to be

considered with this technique. First, the agreement of the participants in terms of confidentiality, and second, the skill of the investigator in conducting a group interview.

Fieldwork

The technique of participant observation (the fieldwork phase of this study) which was employed for a three week period merits critical examination. The fieldwork was terminated early because the investigator was unable to function effectively as a participant observer in an area to which she had been, over a ten year period, thoroughly enculturated. There is considerable variation in anthropology on the matter of insider versus outsider research using participant observaton (see, for example, the arguments of Aguilar, 1981) and support for either position can be located. There is a serious lack of critique on the matter within nursing although, Pearsall (1965) identified potential difficulties and cautioned nurses in its use. Nurse researchers face special problems in this area and seem to have a natural inclination toward doing participant observation within their own culture, and not infrequently within their own sub-specialities. This matter of an experienced ICU nurse doing participant observation in an ICU was considered at the outset of this study. It was thought that because the ICU was in a different province and because the investigator had worked only sporatically in ICU for the past eighteen months that any difficulties could be managed by periods of withdrawal and consultation with the thesis committee. This however, was not the case. Three processes occurred which resulted in the early termination of the fieldwork.

First, it was extremely difficult to separate the nurses' actions into discrete activities, and to recognize touch when it occurred. This would be consistent with Benner's (1984) descriptions of the expert practitioner who is unable to articulate her decision making process or her discrete actions because they are so internalized. This difficulty in discriminating touch combined with the investigator's lack of skill at participant observation resulted in field notes that were not particularly helpful. It was also difficult at times to maintain an effective balance, as Pearsall (1965) discusses, between observer and

participant, the tendency being to "over participate" and consequently find it difficult to observe effectively.

Second, the investigator was unable to move from the previously held role (for five years) of head nurse in an ICU to the role of participant observer. Many things were viewed from the perspective of a head nurse, and consequently distorted in terms of the purposes of the fieldwork. This phenomenon was not evident during the interviews, but rather seemed to be stimulated by being physically present in an ICU. It resulted in feelings of frustration and impotence. It may be that the discomfort with the participant observer role resulted in the investigator "flipping" in her mind into a role with which she felt a high degree of familiarity and comfort. Further, there was the accompanying distress of being an observer and not being able to respond or intervene.

Third, the investigator was unable to achieve adequate distance from the emotional aspects of the ICU. When one is working in the ICU complex defenses are constructed to buffer against the often harsh realities of the ICU and the risks of emotional over involvement. However, it was difficult for the investigator to sustain these defenses when not in the area. Consequently, old experience and feeling was often triggered by the fieldwork, making data collection difficult, and objectivity impossible to achieve. As a result the findings from this part of the study were of limited use. Interestingly, though after some time away from the experience the investigator was able to draw upon them to assist with the data analysis of the remainder of the study.

In light of these processes and the variation in the literature on insider research, it would seem that two things are required. First, open dialogue within nursing on conducting participant observation in one's own speciality is needed. Second, it would appear to be prudent for potential researchers to consider the potential difficulties of participant observation carefully before conducting such fieldwork in their own specialities.

Implications

Future Research

Several implications arise from this study for future research. They can be divided into three categories: 1) adjuncts to this study, 2) methodological implications, and 3) future areas of study. Each of these categories is discussed below.

Adjuncts to this Study

Two of the most obvious adjuncts to this study are inclusion of ICU patients and male nurses. Studies examining patients', particularly ICU patients' perceptions, of touch are noticably absent from the literature. Since perception of touch is integral to meaning, and since it can be predicted that patients' perceptions would be influenced by at least as complex an array of variables as those of nurses, inductive methods are indicated at this stage of our understanding. Such studies, in combination with studies designed to measure the effects of touch on patients would add considerably to our understanding. There is evidence in the behavioral science literature that sex is an important variable in the touch equation. Consequently, male nurses need to be studied. A design similar to that of this study would add to our understanding of the touch dimensions reported in this thesis.

Two other areas of study would contribute to, and broaden, the findings of this study. They are inclusion of families perceptions of, and use of touch in the ICU, and the inclusion of different ethnic and cultural (e.g., British) groups, both nurse and patient/family. The findings of this study are noticably restricted to white, middle class nurses, and the literature is suggestive of considerable ethnic and cultural variation. The findings reported here suggest that families exert a complex influence on nurses' touching patterns that merits further study.

Methodological Implications

Two issues have been repeatedly raised in this thesis--inductive versus deductive design, and the definition of touch. Adequate theoretical and operational definition of touch is the single most pressing issue in touch research. Until definitions capture and reflect the

gestalt nature of touch, research will continue to be plagued with validity problems and to address single dimensions of touch within a narrow context. A broader conceptualization of touch would lead to different research questions than have been raised to date and would in turn, influence study design. Research questions to date have, generally speaking, led to deductive approaches. It is this investigators position that inductive and deductive approaches *are* compatible, but that each must be question appropriate and sensitive to the central role of context. The preponderance of deductive design, when so little has been known with certainity, has in many instances been premature. While existing research has added to our understanding, often by reporting what did *not* affect touch, much of it would perhaps have been more meaningful if it had been generated on the basis of inductively determined findings. For instance, based on the *patterns* findings of this study, future studies would consider a wider range of variables and be more atuned to their potentially interactive nature than they have in the past.

Other methodological implications arising from this study involve the utilization of additional methods, such as, participant observation and ethology. Triangulation, with the use of additional methods, (including the combined usage of qualitative and quantitative methods), would strengthen the validity of future research, and add further to our understanding of various touch dimensions.

Future Areas of Study

Several areas of future study can be identified from this study's findings. First, are the areas needed to contribute to the validity of this study. This includes more work on the conceptualization of touch, and examination of the kinds of touch and the conditions under which each is used. In particular, task and protective touch require more study. The mechanisms of protective touch are a rich area of inquiry and are urgently needed given the mechanisms reported in this study. Further, the issue of control merits further examination in light of its significant role in the ICU and its intimate relationship to various of the task and protective touches. Normative patterns of touching need to be studied further,

especially relative to the differences which may be evident in different nursing contexts. For example, normative patterns of touching may be quite different in a neurological unit where most of the patients have an altered level of consciousness, or suffer from some degree of spinal cord injury and resultant paralysis.

Four areas of future research can be identified based on the above and on the 'kinds' 'patterns' findings presented in Chapter IV. First, the taxonomy of the kinds of touch needs to be confirmed and the definition of touch proposed in this study elaborated. Questions as to the ability of observers to accurately identify different touches need to be addressed and interrater reliablity needs to be demonstrated in observational studies. Second, studies need to be designed that address the following questions: can touch be used as a therapeutic tool? can touch strategies be consistently prescribed? can the delivery of touch be changed? Third, studies are needed that examine whether certain kinds of touch facilitate the recovery of patients better than other kinds and whether certain kinds of touch have more of an influence than others on patient comfort. Fourth, the effect of the different patient variables and combinations of patient variables on the type of touch used requires further study. Studies similar to those discussed in Chapter II that examined variables affecting touching are indicated, but with adjustments, particularly to the type, amount, and interactive nature of variables--consistent with the reported findings of this study.

The entire group of process findings, given that they represent in many aspects, *new* findings need further study to verify theoretical linkages and determine their configuration with the touch models previously discussed. Because of the process nature of these findings and the embryonic stage of our understanding regarding such processes, this in an area where inductive inquiry is probably most indicated. The *learning to touch* findings have particular relevance for nursing education and require more study. One dimension of this model, nursing school, would benefit from survey design in order to determine the current state of teaching on touch. The work phase of learning to touch requires more study, and it seems likely that explication of this phase may have a considerable amount in

common with the research of Benner (1984).

The second area of future study indicated from the results of this study involves what might be described as tangential areas, for instance, the future exploration of the role of intuition within nursing may prove to contribute to our understanding of how nurses determine the use of touch as a nursing strategy. This, in combination with research that extends Benner's (1984) work, may provide information on the cueing process which extends beyond touch. The systematic study of cueing would probably contribute, not only to our understanding of touch, but as well, to our understanding of communicative processes in general, and the nurse's therapeutic use of self. Finally, there appears to be relatively little cross over between research on *therapeutic touch* and *regular touch.* Although, these two *varieties* of touch can be separated conceptually and by definition, there is evidence in the findings of this study that there may be more of a linkage between them than has been thought to date.

Nursing Education

The most pressing implication arising from this study for nursing education is the need for touch to be formally incorporated into curricula. It is apparent from the findings of this study that touch can be learned, and that much of the learning is done informally. This latter point has implication for the manner in which touch is taught. If role modelling is one of the primary mechanisms of learning, then the role of clinical instructors in nursing education is clearly an important one. Equally important is an understanding of the many variables that function to determine a nurse's touching style. The inference that can be drawn from this is that the exploration of values and beliefs is important to students, as are realistic expectations of how nurses manage in their work life. One of the criticisms made by informants in this study was their socialization into the role of empathetic, understanding nurse, with little attention to the reality of the many situations and patients in the working world that made it difficult, if not impossible to be "understanding" and "empathetic." If nurses are being instilled with high expectations, and not receiving assistance with the

development of effective tools and strategies with which to manage those expectations, or to effectively manage the difficult situations and conditions they will encounter in the work environment, then educators need to reexamine curricula. The findings dealing with protective touch and patterns of touch are a rich source of reflective material for nurse educators relative to dimensions of touch. The investigator has suggested that these dimensions have sometimes been neglected because they arouse uncomfortable emotions in nurses who are trying to instill the positive and caring dimensions of the profession. The process findings are also of particular relevance in terms of an understanding of normal touching, and the subsequent ability to diagnose disturbances in this process.

Nursing Practice

There are many implications that can be drawn from the findings of this study. There are first, general implication for nursing practice, and second, those implications salient to the ICU setting. General implications are presented first, followed by those more specific to the ICU.

General Implications

The most important implication for practice arising from this study is that an awareness of kinds, patterns, and processes of touch offers practitioners the means by which to change nursing practice. An analogy can be drawn between the work of Freire (1981) and an awareness of touch as a nursing strategy. Freire maintains that a group unable to name its oppression exists existentially in a culture of silence, unable either to reflect or to act. It seems plausible that a group (nurses) unable to articulate a concept central to its practice (i.e., touch and all of its dimensions), practices, in some respects, in a culture of silence. Unless nurses are able to discuss and understand touch as a concept connected centrally to practice they cannot reflect or act on it. The findings of this study indicate nurses can be made aware of touching behaviors. With such an awareness touch can be incorporated into nursing care plans according to patient needs, and, therefore, used as a therapeutic intervention (i.e., nursing strategy). It seems logical in light of reports of existing research

on the critical importance of touch to human infant survival and well being (for example, Montagu, 1986; Spitz, 1946), to extend the inference that touch is important to the health of adults. The effects of touch on patients are not well understood and urgently need to be investigated more extensively. However, touch *is* an integral part of nursing practice and the findings of this study indicate multiple kinds, purposes, and likely results of the use of touch. Sensitivity, then, to the touch in one's practice affords the potential to tailor that particular dimension of practice to the unique needs of the patient. Further, a heightened awareness of touch implies a therapeutic benefit for the nurse. For example, awareness of the *cold* type of touch enables nurses to name that behavior and hence, discuss it. The result of such discussion could potentially be a change in the support structure for ICU nurses (e.g., the implementation of debriefing sessions).

Implications for the ICU

First, the amount of energy required to touch and the changes that occur with depleted energy and increased levels of frustration, are probably indicative that more than touch is affected by fatigue and stress. Nurse managers of ICUs cognizant of this will be more sensitive, in terms of short term interventions, to scheduling, patient assignment allocations, and adequate rest periods. Longer term interventions require attention to employee screening techniques, adequate staffing levels and standards, stress management programs, counselling support for staff, and adequate employee health programs.

Second, the fear that ICU nurses have for their own physical health can be addressed, in part at least, by adequate and accessible information, and recognition that it is a legitimate fear. The realization that fear for one's physical safety can affect nursing care is, in and of itself, significant because such a realization enables the nurse and nurse managers to consider ways by which to address it.

Third, appreciation of the mechanisms through which ICU nurses use protective touch to defend against emotional pain, and by which they create meaning (see Hutchinson, 1984) would lead to several possible avenues of action, especially in terms of critical care

education and orientation programs, and in the the use of *debriefing* techniques. This latter point is of particular interest as there seems to be little if any literature on how to effectively and healthily manage the powerful emotions generated by the experiences ICU nurses consistently encounter. Such management could involve working through and resolving feelings, that is, debriefing. Rather than address feelings in this manner, however, the informants in this study indicated a need to *defend against* such feeling in order to protect themselves. If the use of some of the protective touches is indeed a mechanism to protect the nurse emotionally, and if some of the protective touches are precursors to abusive touch, the findings of this study indicate that in most instances the nurse arrives at this juncture, not through some intrinsic fault of her own, but because of a combination of *preventable* factors. In this study the informants indicated that the experienced nurse has learned how to cope with real and potential loss of control (e.g., regular and drastic measures), particularly with the behavioral category of patients. Two questions arise from this. Is this learning solely a function of experience? That is, can these mechanisms be taught to the new nurse? And, are the measures that the experienced nurse uses the most appropriate ones? Or, does she implement measures such as restraint and sedation because organizational and environmental factors leave her no choice?

The final implications that arise from this study concern patterns of touching, the variables that influence these patterns, and the processes of touching. The value of understanding these patterns for nursing practice is that they begin to inform us of the multiple factors that interrelate to influence one dimension of nurses' behavior. It is possible that touch is a sensitive indicator of nurses' behavior in general. If this is true, an understanding of the variables identified in this study has significant importance for understanding the culture specific behavior of ICU nurses. The better we understand the variables that influence touching behavior, the more equipped we are to identify disturbances in this behavior, and to counsel ICU nurses in its therapeutic use.

An awareness on the part of ICU nurses of the touching process and the potential

disturbances in it, in the ICU, will enable nurses to use touch as a nursing strategy with increased sensitivity. An awareness of the process of learning to touch may produce as its greatest contribution, an avenue by which nurses are able to examine their own experiences with touch. The informants in this study indicated that awareness and effort on their part to become more comfortable with touch was important to their ability to change their touching behavior. An awareness of the importance of maturation may give nurse managers in ICUs cause to reflect on the recruitment of nurses in their third and fourth decades, in order to capitalize on the life experience (and frequently accompanying maturity) that they have the potential to bring to a unit, especially in terms of role modelling.

Summary of the Study

This study examined intensive care nurses' perceptions of the meaning and use of touch. Existing research on the touching behaviors of nurses has been virtually absent. Further, it has been characterized by a uni-dimensional definition of touch, a positivity bias, and a disproportionate amount of attention to the measurement and correlation of various demographic variables with frequency and location of touch. Meaning and context, central to an understanding of touch have been largely ignored. In order to address the nurses' perceptions within the context of ICU, the methods of ethnoscience, ethnography, and grounded theory were utilized. Interviews with eight experienced ICU nurses from the same general ICU were the major source of data. A three week participant observation phase was also conducted in the ICU of a second large urban hospital.

The findings of this study indicate that touch is used as a nursing strategy with many purposes serving to meet the needs of both nurse and patient. Touch was conceptualized, based on analysis of the interview data, as a complex gestalt. The dimensions of the touch gestalt identified in this study were: skin to skin contact, voice, posture, affect, emotional contact, and context. This finding represents a significant point of departure from previous research, in which touch is traditionally defined as skin to skin contact only. Further, the conceptualization of touch as a gestalt represents the core finding of this study because it

permitted the elicitation of: 1) a taxonomy of the kinds of touch which is substantially more complete than anything described to date, 2) normative patterns of touch (touching norms) within the ICU, and 3) touching processes fundamental to an understanding of *how* nurses touch.

Three kinds of touch were identified in this study: touch to communicate caring (caring touch), touch to accomplish a task (task touch), and touch to protect nurse and/or patient (protective touch). Caring and task touch are comparable to the two kinds of touch previously identified in the nursing literature, although the descriptions of each in this study are more comprehensive than have been detailed in existing literature. Protective touch represents a previously unidentified kind of touch. Sub-seggregates of each of these kinds of touch were described. Caring touch is comprised of comforting and encouraging touch; task touch of working and controlling touch; and protective touch of controlling and distancing touch. As well, 27 discrete types of touch were identified within these five sub-seggregates.

Normative patterns of touch in the ICU were elicited. Three major groups of variables--nurse, daily (contextual), and patient--combine and interact in a constantly changing pattern to determine the particular touching style of the ICU nurse in any given situation. These patterns represent the first description of nurses' touching norms, and offer insight into the multiple variables that combine to shape a nurse's *style of touch*. As such, they represent a rich source of information on the complexity of the utilization of touch.

The use of grounded theory resulted in the identification of a learned touching process and the process by which nurses acquire a touching style. Intrinsic to both of these processes is the process of cueing, by which the nurse determines the kind and type of touch she will use in *each* encounter. Description of these processes, which begin to inform us of *how* nurses touch and how they learn to touch, is critical to understanding normal processes of touch, and consequently to the ability to teach nurses about touch, evaluate its

effectiveness, and recognize aberrancies in its use. Without an understanding of the *how* of touch, it is impossible to comprehensively understand the use of touch within nursing.

Previous work on touch has contributed to the development of a theoretical framework within which to understand and study touch in nursing practice, to our understanding of the effects of touch, and the variables that function to alter the aspects of frequency and location of touch. In addition previous work on touch has contributed to a beginning understanding of the variety of touch meanings. However, there has been a void relative to the consideration of meaning and context, and the configuration of the nurse in the touch equation. This qualitative study contributes to the existing touch research by beginning to fill this void, and further, by contributing to the development of a theory of touch within nursing.

BIBLIOGRAPHY

Aamodt, A. M. (1981). Examining ethnography for nurse researchers. *Western Journal of Nursing Research, 4*, 209-221.

Agar, M. H. (1980). *The Professional Stranger*. Toronto: Academic Press.

Aguilar, J.L. (1981). Insider research: An ethnography of a debate. In D.A. Messerschmidt (Ed.), *Anthropologists at home in North America* (pp. 15-28). New York: Cambridge University Press.

Aguilera, D. C. (1967). Relationship between physical contact and verbal interaction between nurses and patients. *Journal of Psychiatric Nursing, 5*, 5-21.

Algana, F. J., Whitcher, S. J., Fisher, J. D., & Wicas, E. A. (1979). Evaluative reaction to interpersonal touch in a counselling interview. *Journal of Counselling Psychology, 26*, 465-472.

Amacher, N. J. (1973). Touch is a way of caring. *The American Journal of Nursing, 73*, 852-854.

Anderson, C.A., & Basteyns, M. (1981). Stress and the critical care nurse reaffirmed. *Journal of Nursing Administration, 11*(1), 31-34.

Barnett, K. A. (1972a). Theoretical construct of the concepts of touch as they relate to nursing. *Nursing Research, 21*, 102-110.

Barnett, K. (1972b). A survey of the current utilization of touch by health team personnel with hospitalized patients. *International Journal of Nursing Studies, 9*, 195-209.

Battenfield, B.L. (1984). Suffering--A conceptual description and content analysis of an operational schema. *Image: The Journal of Nurisng Scholarship, 16*, 36-41.

Belenky, M.F., Clinchy, B.M., Goldbeyer, N.R., & Tarule, J.M. (1986). *Women's ways of knowing*. New York: Basic Books, Inc.

Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Don Mills, Ont.: Addison-Wesley Publishing Co.

Benoliel, J. Q. (1984). Advancing nursing science: Qualitative approaches. *Western Journal of Nursing Research, 6* (3), 1-8.

Bernadino, L. (1985). Effective Communication as an intervention for sensory deprivation in the eldery client. *Topics in Clinical Nursing, 6* (4), 72-81.

Birch, E. R. (1986). The experience of touch received during labor. *Journal of Nurse-Midwifery, 31*, 270-275.

Birnbaum, M. L. (1984). High tech/low touch? *Critical Care Medicine, 12*, 1006-1007.

Bogdan, R., & Taylor, S. J. (1975). *Introduction to Qualitative Research Methods*. Toronto: John Wiley & Sons.

Burnside, I. M. (1973). Touching is talking. *The American Journal of Nursing, 73,* 2060-2063.

Burnside, I. M. (1981). The theraputic use of touch. In I. M. Burnside (Ed.), *Nursing and the Aged* (pp. 503-518). Toronto: McGraw/Hill.

Burton, A., & Heller, L. G. (1964). The touching of the body. *The Psychoanalytic Review, 51,* 122-134.

Cashar, L., & Dixon, B. K. (1967). The theraputic use of touch. *Journal of Psychiatric Nursing, 5,* 442-451.

Clark, C.C. (1980). Burnout: Assessment and intervention. *Journal of Nurisng Administration, 10*(9), 39-43.

Clarke, P. E., & Clarke, M. J. (1984). Therapeutic touch: Is there a scientific basis for the practice? *Nursing Research, 33,* 37-41.

Clement, J. M. (1983). A descriptive study of the use of touch by nurses with patients in the critical care unit. (Doctoral Dissertation, The University of Texas at Austin, 1983). *Dissertation Abstracts International, 43,* 1060B.

Clement, J. M. (1986). Caring and touching as nursing interventions. In C. M. Hudak, B. M. Gallo and T. Lohr, (Eds.), *Critical Care Nursing.* (pp. 33-42). New York: J. B. Lippincott.

Copp, L.A. (1974). The spectrum of suffering. *American Journal of Nursing, 74,* 491-495.

Copstead, L. E. C. (1980). Effects of touch on self-appraisal and interaction appraisal for permanetly institutionalized older adults. *Journal of Gerontological Nursing, 6,* 747-752.

Cruise, M. J., & Gorenberg, B. D. (1985). The tools of management: Keeping high touch in a high tech world. *International Nursing Review, 32* (6), 166-169, 173.

Crusco, A. H., & Wetzel, C. G. (1984). The midas touch: The effects of interpersonal touch on restaurant lipping. *Personality and Social Psychology Bulletin, 10,* 512-517.

Deethardt, J. F., & Hines, D. G. (1983). Tactile communication and personality differences. *Journal of Nonverbal Behavior, 8,* 143-156.

DeThomaso, M. T. (1971). Touch power and the screen of lonliness. *Perspectives in Psychiatric Care, 9,* 112-118.

DeWever, M. K. (1977). Nursing home patients' perception of nurses' affective touch. *The Journal of Psychology, 96,* 163-171.

Diers, D. (1979). *Research in Nursing Practice.* Toronto: J. B. Lippincott.

Dimond, M. (1980). Caring: Nursings' promise to the elderly. *Geriatric Nursing, 1,* 196-198.

Dominion, J. (1971). The psychological signifigance of touch. *Nursing Times, 67,* 896-89

Drescher, V. M., Gantt, W. H., & Whitehead, W. E. (1980). Heart rate response to touch. *Psychosomatic Medicine, 42,* 559-565.

Drescher, V. M., Whitehead, W. E., Morrill-Corkin, E. D., & Cataldo, M. F. (1985). Physiological and subjective reactions to being touched. *Psychophysiology, 22,* 96-100.

Duncan, S. (1969). Nonverbal communication. *Psychological Bulletin, 72,* 118-137.

Dunkel, J., & Eisendrath, S. (1983). Families in the intensive care unit: Their effect on staff. *Heart & Lung, 12,* 258-261.

Ebersole, P., & Hess, P. (1981). Touch, intimacy, and sexuality. In P. Ebersole and P. Hess (Eds.), *Toward Healthy Aging.* Toronto: The C. V. Mosby Company.

Ehrenreich, B., & English, D. (1979). *For her own good: 150 years of the experts' advice to women.* Garden City: Anchor Press/Doubleday.

El-Kafass, A. A. R. (1983). A study of the expressive touch behaviors by nursing personnel with patients in critical care units (Doctoral dissertation, The Catholic University of America, 1983). *Dissertation Abstracts International, 43,* 3187B.

Ernst, P., & Shaw, J. (1980). Touching is not taboo. *Geriatric Nursing, 1,* 193-195.

Estabrooks, C. A. (1987). Touch in nursing practice: A historical perspective. *Journal of Nursing History, 2* (2), 33-49.

Evaneshko, V., & Kay, M. A. (1982). The ethnoscience research technique. *Western Journal of Nursing Research, 4,* 49-64.

Fanslow, C. A. (1983). Therapeutic touch: A healing modality throughout life. *Topics in Clinical Nursing, 5* (2), 72-79.

Field, P. A., & Morse, J. M. (1985). *Nursing research: The application of qualitative approaches.* London: Croom Helm.

Firth, H., McIntee, J., McKeown, P., & Britton, P. (1986). Burnout and professional depresson: related concepts? *Journal of Advanced Nursing, 11,* 633-641.

Fisher, J. D., Rytting, M., & Heslin, R. (1976). Hands touching hands: Affective and evaluative effects of interpersonal touch. *Sociometry, 39,* 416-421.

Fitzsimmons, V. M. (1983). The aging integument: A sensitive and complex system. *Topics in Child Nursing, 5* (2), 32-38.

Frank, L. K. (1957). Tactile communication. *Genetic Psychology Monographs, 56,* 209-255.

Frankl, V.E. (1963). *Man's search for meaning: An introduction to logotherapy.* New York: Washington Square Press.

Freeman, L. (1982). *It's my body*. Seattle: Parenting Press, Inc.

Freeman, L. (1986). *Loving touches*. Seattle: Parenting Press, Inc.

Freire, P. (1981). *Pedagogy of the oppressed*. (M. Bergman Ramos, Trans.). New York: Continuum. (Original work published 1970).

Freudenberger, H.J. (1974). Staff burn-out. *Journal of Social Issues, 30*, 159-165.

Gaut, D. A. (1983). Development of a theoretically adequate description of caring. *Western Journal of Nursing Research, 5*(4), 313-324.

Gaut, D.A. (1986). Evaluating caring competencies in nursing practice. *Topics in Clinical Nurisng, 8*(2), 77-83.

Germain, C. P. (1979). *The cancer unit: An ethnography*. Wakefield, Mass. : Nursing Resources, Inc.

Glaser, B. G. (1978). *Theoretical Sensitivity*. Mill Valley, Calif.: The Sociology Press.

Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory*. New York: Aldine Publishing Company.

Glick, M. S. (1986). Caring touch and anxiety in myocardial infarction patients in the intermediate cardiac care unit. *Intensive Care Nursing, 2*, 61-66.

Goffman, E. (1961). *Asylums*. Garden City, NY: Doubleday & Company.

Goldman, M., & Fordyce, J. (1983). Prosocial behavior as affected by eye contact, touch, and voice expression. *The Journal of Social psychology, 121*, 125-129.

Goldman, M., Kiyohara, O., & Pfannensteil, D. A. (1985). Interpersonal touch, social labelling, and the foot-in-the-door effect. *The Journal of Social Psychology, 125*, 143-147.

Goodwin, L. D., & Goodwin, W. L. (1984). Qualitative versus quantitative research or qualitative and quantitative research? *Nursing Research, 33*, 378-380.

Goodykoontz, L. (1979). Touch: Attitudes and Practice. *Nursing Forum, 18*, 4-17.

Hageman, L. (1973). Suffering--an avenue to joy. *Humanitas: Journal of the Institute of Man, 9*, 83-96.

Hall, E. T. (1966). *The Hidden Dimension*. Garden City, NY: Doubleday.

Hamner, M. L., & Lalor, L. J. (1983). The aged patient in the critical care setting. *Focus on Critical Care, 10* (6), 23-29.

Harlow, H. F. (1974). *Learning to love*. New York: Jason Aronson, Inc.

Harris, J.S. (1984). Stressors and stress in critical care. *Critical Care Nurse,4*(1), 84-97.

Hay, D., & Oken, D. (1972). The psychological stresses of intensive care nursing. *Psychosomatic Medicine, 34*, 109-118.

Hayduk, L.A. (1983). Personal space: Where we now stand. *Psychological Bulletin, 94*, 293-335.

Heidt, P. (1981). Effect of therapeutic touch on anxiety level of hospitalized patients. *Nursing Research, 30*, 32-37.

Henley, N. M. (1973). Status and sex: some touching observations. *Bulletin of the Psychonomic Socirty, 2*, 91-93.

Henley, N.M. (1977). *Body politics: Power, sex and nonverbal communication*. Englewood Cliffs, NJ: Prentice-Hall.

Heslin, R. (1974, October). *Steps toward a taxonomy of touching*. Paper presented at the meeting of the Midwestern Psychological Association, Chicago.

Heslin, R. (1978, September). *Responses to touching as an index of sex norms and attitudes*. Paper presented at the meeting of the American Psychology Association Symposium, Toronto.

Heslin, R., Nguyn, T. D., & Nguyen, M. L. (1983). Meaning of touch: The case of touch from a stranger or same sex person. *Journal of Nonverbal Behavior, 7*, 147-157.

Hoddinott, E., & Follingstad, D. R. (1983). Effects of instructional set and personality variables on the use of touching. *Perceptual and Motor Skills, 56*, 299-309.

Hollinger, L. M. (1980). Perception of touch in the elderly. *Journal of Gerontological Nursing, 6*, 741-746.

Hubble, M. A., Noble, F. C., & Robinson, S. E. (1981). The effect of counsellor touch in an initial counselling session. *Journal of Counselling Psychology, 28*, 533-535.

Huckabay, L., & Jagla, B. (1979). Nurses' stress factors in the intensive care unit. *Journal of Nursing Administration, 9*(2), 21-26.

Huss, A. J. (1977). Touch with care or a caring touch. *The American Journal of Occupational Therapy, 31*, 11-18.

Hutchinson, S. A. (1984). Creating meaning out of horror. *Nursing Outlook, 32*, 86-90.

Hutchinson, S. A. (1985). Perspective: Field research in a neonatal intensive care unit. *Topics in Clinical Nursing, 7*, 24-28.

Johnson, B. S. (1965). The meaning of touch in nursing. *Nursing Outlook, 13*, 59-60.

Jones, S. E., & Yarbrough, A. E. (1985). A naturalistic study of the meanings of touch. *Communication Monographs, 52*, 19-56.

Jourard, S. M. (1966). An exploratory study of body-accessibility. *British Journal of Social and Clinical Psychology, 5*, 221-231.

Jourard, S. M., & Rubin, J. E. (1968). Self-disclosure and touching: A study of two models of interpersonal encounter and their inter-relation. *Journal of Humanistic Psychology, 8*, 39-48.

Keller, E., & Bzdek, V. M. (1986). Effects of therapeutic touch on tension headache pain. *Nursing Research, 35*, 101-106.

Knable, J. (1981). Handholding: One means of transcending barriers of communication. *Heart and Lung, 10*, 1106-1110.

Krieger, D. (1975). Theraputic touch: The imprimatur of nursing. *The American Journal of Nursing, 8*, 152-155.

Kubler-Ross, E. (1969). *On death and dying*. New York: McMillan.

Langland, R. M., & Panicucci, C. L. (1982). Effects of touch on communication with elderly confused patients. *Journal of Gerontological Nursing, 8*, 152-155.

Larsen, K. S., & Leroux, J. (1984). A study of same sex touching attitudes: Scale development and personality predictors. *The Journal of Sex Research, 20*, 264-278.

LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research, 52*, 31-60.

Leininger, M. M. (1969). Ethnoscience: A promising approach to improve nursing practice. *Image, 3*, 2-8.

Leininger, M. M. (1981). *Caring: An essential human need*. Thorofare, NJ: C. B. Slack.

Leininger, M. M. (1984). Care: The essence of nursing and health. In M. M. Leininger (Ed.), *Care: The essence of nursing and health* (pp.3-15). Thorofare, NJ: C. B. Slack.

Leininger, M. M. (1986a). Care facilitation and resistance factors on the culture of nursing. *Topics in Clinical Nursing, 8*(2), 30-36.

Leininger, M. M. (1986b). Ethnoscience method and componential analysis. In M.M. Leininger (Ed.), *Qualitative Research Methods in Nursing* (pp. 237-249). Toronto: Grune and Stratton.

Levitan, A. A., & Johnson, J. M. (1986). The role of touch in healing and hypnotherapy. *American Journal of Clinical Hypnosis, 28*, 218-223.

Lionberger, H. J. (1986). Therapeutic touch: A healing modality or a caring strategy? In P. L. Chinn (Ed.), *Nursing Research Methodology: Issues and Implementation* (pp. 169-180.

Lomaranz, J., & Shapira, A. (1974). Communicative patterns of self-disclosure and touching behavior. *The Journal of Psychology, 88*, 223-227.

Lynch, J.J. (1978). The simple act of touching. *Nursing 78, 8*(6), 32-36.

Lynch, J. J., Thomas, S. A., Mills, M. E., Mallinow, K., & Katcher, A. H. (1974). The effects of human contact on cardiac arrythmia in coronary care patients. *The Journal of Nervous and Mental Diseases, 158*, 88-99.

Lynch, J. J., Flaherty, L., Emrich, C., Mills, M. E., & Katcher, A. H. (1974). Effects of human contact on the heart activity of curarized patients in a shock-trauma unit. *American Heart Journal, 88*, 160-169.

Lynch, J. J., Thomas, S. A., Paskewitz, D. A., Katcher, A. H., & Weir, L. O. (1977). Human contact and cardiac arrythmia in a coronary care unit. *Psychosomatic Medicine, 39*, 188-192.

Magill, K.A. (1982). Burnin, burnout & the brightly burning. *Nursing Management, 13*(7), 17-21.

Major, B. (1981). Gender patterns in touching behavior. In C. Mayo & N. M. Henley (Eds.), *Gender and Nonverbal Behavior* (pp. 15-37). New York: Springer/Verlag.

Maslach, C. (1976, September). Burned-out. *Human Behavior*, pp. 16-22.

Maslach, C. (1978). The client role in staff burn-out. *Journal of Social Issues, 34*, 111-124.

Mason, A., & Pratt, J. (1980). Touch. *Nursing Times, 76*, 999-1001.

Mayer, D. K. (1986). Cancer patients' and families' perceptions of nurses' caring behaviors. *Topics in Clinical Nursing, 8*(2), 63-69.

McCorkle, R. (1974). Effects of touch on seriously ill patients. *Nursing Research, 23*, 125-132.

McCoy, P. (1977). Further proof that touch speaks louder than words. *RN, 40* (11), 43-46.

McGuire, M. A. (1983). A touch in the dark. *Critical Care Nurse, 3*(5), 53-56.

Melia, K. (1977). The intensive care unit--a stress situation? *Nursing Times, 73*, 17-18.

Mills, M. E., Thomas, S. A., Paskewitz, D. A., & Katcher, A. H. (1976). Effect of pulse palpation on cardiac arrythmia in coronary care patients. *Nursing Research, 25*, 378-382.

Mischler, E. G. (1979). Meaning in context: Is there any other kind? *Harvard Educational Review, 49*, 1-19.

Mitchell, P. H., Habermann-Little, B., Johnson, F., VanInwegen-Scott, D., & Tyler, D. (1985). Critically ill children: The importance of touch in a high technology environment. *Nursing Administration Quarterly, 9*, 38-46.

Montagu, A. (1986). *The human significance of the skin*. (3rd ed.). New York: Harper & Row Publishers.

Morse, J. M. (1983). An ethnoscientific analysis of comfort: A preliminary investigation. *Nursing Papers, 15*, 6-19.

Morse, J. M. (1986). Quantitative and qualitative research: Issues in sampling. In P. L. Chinn (Ed.), *Nursing Research Methodology: Issues and Implementation* (pp. 181-193). Rockville, MD: Aspen Publishers, Inc.

Naisbitt, J. (1982). *Megatrends*. New York: Warner Books, Inc.

Noble, M.S. (1979). Communication in the ICU: Therapeutic or disturbing. *Nursing Outlook, 27*, 195-198.

Nguyen, T., Heslin, R., & Nguyen, M. L. (1975). The meanings of touch: Sex differences. *Journal of Communication, 25*, 92-103.

Older, J. (1977). Four taboos that may limit the success of psychotherapy. *Psychiatry, 41*, 197-204.

Older, J. (1982). *Touching is healing*. New York: Stein and Day Publishers.

Older, J. (1984). Teaching touch at medical school. *Journal of the American Medical Association, 252*, 931-933.

Pattison, J. E. (1978). Effects of touch on self-exploration and the theraputic relationship. *Journal of Consulting and Clinical Psychology, 40*, 170-175.

Pearsall, M. (1965). Participant observation as role and method in behavioral research. *Nursing Research, 14*, 37-42.

Penny, K. S. (1979). Postpartum perceptions of touch received during labor. *Research in Nursing and Health, 2*, 9-16.

Pepler, C. J. (1984). Congruence in relational messages communicated to nursing home residents through nurse aide touch behaviors (Doctoral Dissertation, The University of Michigan, 1984). *Dissertation Abstracts International, 45*, 2106B.

Polit, D., & Hungler, B. (1987). *Nursing Research: Principles and Methods* (3rd. ed.). Toronto: J.B. Lippincott.

Porter, L., Redfern, S., Wilson-Barnett, J., & LeMay, A. (1986). The development of an observation schedule for measuring nurse-patient touch, using an ergonomic approach. *International Journal of Nursing Studies, 23*, 11-20.

Pratt, J. W., & Mason, A. (1984). The meaning of touch in care practice. *Social Science and Medicine, 18*, 1081-1088.

Randolph, G. L. (1984). Therapeutic and physical touch: physiological response to stressful stimuli. *Nursing Research, 33*, 33-36.

Reichardt, C. S., & Cook, T. D.(1979). Beyond qualitative versus quantitative methods. In C. S. Reichardt and T. D. Cook (Eds.), *Qualitative and Quantitative Methods in Evaluation Research* (pp. 7-31). Beverly Hills: Sage Publications.

Reichle, M.J. (1975). Psychological stress in the intensive care unit. *Nursing Digest, 3*, 12-15.

Rich, V.L., & Rich, A.R. (1987). Personality hardiness and burnout in female staff nurses. *Image: The Journal of Nursing Scholarship, 19*, 63-66.

Rieman, D. J. (1986). Noncaring and caring in the clinical setting: Patients' descriptions. *Topics in Clinical Nursing, 8*(2), 84-93.

Roach, Sister M. Simone. (1984). *Caring: The human mode of being. Implications for nursing*. Toronto: Faculty of Nursing, University of Toronto.

Roberts, S. L. (1980). Territorality: Space and the aged patient in the critical care unit. In I. M. Burnside, (Ed.), *Psychosocial Nursing Care of the Aged.* (pp. 195-210). Toronto: McGraw Hill.

Rosenhan, D. (1973). On being sane in insane places. *Science,179*, 250-258.

Rubin, R. (1963). Maternal touch. *Nursing Outlook,11*, 828-831.

Rush, F. (1980). *The best kept secret: Sexual abuse of children*. Toronto: McGraw-Hill Book CO.

Sandelowski, M. (1986). The problem of rigor in qualitative research. *Advances in Nursing Science, 8* (3), 27-37.

Schmall, J. A. (1964). Ritualism in nursing practice. *Nursing Forum, 3*, 74-85.

Schraeder, B.D., & Fischer, D.K. (1987). Using intuitive knowledge in the neonatal intensive care nursery. *Holistic Nursing Practice, 1*(3), 45-51.

Seaman, L. (1982). Affective Nursing Touch. *Geriatric Nursing, 3*, 162-164.

Shaver, J. (1986). High touch nursing in a high tech world. *The Canadian Nurse, 82(5)*, 16-19.

Silverman, A. F. , Pressman, M. E., & Bartel, H. W. (1973). Self-esteem and tactile communication. *Journal of Humanistic Psychology, 13*, 73-77.

Soares, C. A. (1978). Low verbal usage and status maintenance among intensive care nurses. In N. L. Chaska (Ed.), *The Nursing Profession: Views Through the Mist* (pp.198-204). New York: McGraw/Hill

Spitz, R. A. (1946). Hospitalism. *The Psychoanalytic Study of the Child, 2*, 113-117.

Spradley, J. P. (1970). *You Owe Yourself a Drunk: An Ethnography of Urban Nomads*. Boston: Little Brown.

Spradley, J. P. (Ed.). (1972). *Culture and cognition: Rules, maps and plans*. San Francisco: Chandler Publishing Company.

Spradley, J. P. (1979). *The Ethnographic Interview*. Toronto: Holt, Rinehart, & Winston.

Spradley, J. P. (1980). *Participant Observation*. Toronto: Holt, Rinehart, & Winston.

Steir, D. S., & Hall, J. A. (1984). Gender differences in touch: An empirical and theoretical review. *Journal of Personality and Social Psychology, 47*, 440-459.

Suiter, R. L., & Goodyear, R. K. (1985). Male and female counselor and client perceptions of four levels of counselor touch. *Journal of Counselling Psychology, 32*, 645-648.

Summerhayes D. L., & Suchner, R. W. (1978). Power implications of touch in male-female relationships. *Sex Roles, 4*, 103-110.

Sussman, N. M., & Rosenfeld, H. M. (1978). Touch, justification, and sex: Influences on the aversiveness of spatial violations. *The Journal of Social Psychology, 106*, 215-225.

Swanson, J. M., & Chenitz, W. C. (1982). Why qualitative research in nursing? *Nursing Outlook, 30*, 214-245.

Tobiason, S. J. B. (1981). Touching is for everyone. *The American Journal of Nursing, 81*, 728-730.

Ujehly, G. B. (1979). Touch: Reflections and perceptions. *Nursing Forum, 28*, 18-32.

Vachon, M. (1983). Burnout. *Canadian Operating Room Nursing Journal, 1*(2), 19-23.

Ward, E. (1984). *Father-Daughter incest*. London: The Women's Press.

Watson, J. (1979). *Nursing: The Philosophy and Science of caring*. Boston: Little, Brown and Company.

Watson, W. H. (1975). The meanings of touch: Geriatric nursing. *Journal of Communication, 25*, 104-112.

Webster's New Collegiate Dictionary. (1977). Springfield, Mass.: G. & C. Merriam Company.

Weiss, S. J. (1979). The Language of Touch. *Nursing Research, 28*, 76-80.

Weiss, S. J. (1986). Psychophysiologic effects of caregiver touch an incidence of cardiac dysrhythmia. *Heart & Lung, 15*, 495-505.

Whitcher S. J., & Fisher, J. D. (1979). Multidimensional reaction to theraputic touch in a hospital setting. *Journal of Personality and Social Psychology, 37*, 87-96.

Willison, B. G., & Masson, R. L. (1986). The role of touch in therapy: An adjunct to communication. *Journal of Counselling and Development, 64*, 497-500.

Wimbush, F.B. (1983). Nurse burnout: Its effect on patient care. *Nursing Management, 14*(1), 55-57.

Wolanin, M. O. (1981). Nursing therapy, drug therapy, or both? *Geriatric Nursing, 2*, 408-410.

Wolf, Z. R. (1986). The caring concept and nurse identified caring behaviors. *Topics in Clinical Nursing, 8*(2), 84-93.

Young, C.E. (1987). Intuition and the nursing process. *Holistic Nursing Practice, 1*(3), 52-62.

APPENDIX A

INFORMED CONSENT
(NURSE INTERVIEWS)

Project Title: Touching Behaviors of Intensive Care Nurses

Investigator: Carole A. Estabrooks, BN, RN
MN Candidate, Faculty of Nursing
Contact # 432-625

Supervisor: Dr. Janice Morse
Faculty of Nursing
University of Alberta

The purpose of this research study is to examine and describe the touching behaviors of Intensive Care (ICU) nurses from the perspective of the nurse. It is expected that the findings of this study will increase our understanding of how nurses use touch in their daily practice. To date, little is known about touch in nursing, despite its being so central to everyday practice.

THIS IS TO CERTIFY THAT I, _____

HEREBY agree to participate in the study outlined above. I understand that Ms. Estabrooks will interview me at least three times at approximately three week intervals, and that the interviews will be of one to one and a half hours duration each. I understand that the tapes will be erased after completion of the study and that the transcripts of the tapes will be kept in a secure place for a period of three years. I also understand that Ms. Estabrooks may do further analysis of the transcripts during this three year period and that if she does so, that the same ethical considerations as those of the present study will apply to the analysis and publication of results. It is also my understanding that:

1. The interviews will be conducted in my off duty time at a location convenient to myself and Ms. Estabrooks.

2. I will be identified on the tapes and in the typewritten transcripts by code name/number only, and that this information will be shared only with Ms. Estabrooks' thesis committee.

3. I am free to refuse to participate in, or to withdraw from the study at any time, and that this will in no way affect my employment status.

4. A copy of the completed study report will be available within the hospital, should I wish to read it.

5. The results of the study may be published, and that if they are, the anonymity of participants will be assured.

I have been given the opportunity to ask whatever questions I desire, and have had all these questions answered to my satisfaction.

Participant	Witness	Investigator
		Date

APPENDIX B

INFORMED CONSENT

(Nurse Participants - ICU Observation)

Project Title: Touching Behaviors of Intensive Care Nurses

Investigator: Carole A. Estabrooks, BN, RN
MN Candidate, Faculty of Nursing
Contact # 432-6250

Supervisor: Dr. Janice Morse
Faculty of Nursing
University of Alberta

The purpose of this research study is to examine and describe the touching behaviors of Intensive Care (ICU) nurses. It is expected that the findings of this study will increase our understanding of how nurses use touch in their daily practice. To date, little is known about touch in nursing, despite its being so central to everyday practice.

THIS IS TO CERTIFY THAT I, _____

HEREBY agree to participate in the study outlined above. I understand that my participation involves being observed by Ms. Estabrooks as I carry out my nursing care, and that it may mean informal interviews with Ms. Estabrooks either in or outside of the ICU. It is also my understanding that:

1. I will be identified in field notes by code name/number only and that these field notes will remain confidential to Ms. Estabrooks and her thesis committee.

2. I am free to refuse to participate or to withdraw from the study at any time, and that this will in no way affect my employment status.

3. A copy of the study report will be available within the hospital, should I wish to read it.

4. The results of the study may be published and, that if they are the anonymity of participants will be assured.

I have been given the opportunity to ask whatever questions I desire, and have had all these questions answered to my satisfaction.

Participant	Witness	Investigator
		Date

APPENDIX D

INFORMED CONSENT

(Patient - ICU observation)

Project Title: Touching Behaviors of Intensive Care Nurses

Investigator: Carole A. Estabrooks, BN, RN
MN Candidate, Faculty of Nursing
Contact # 432-6250

Supervisor: Dr. Janice Morse
Faculty of Nursing
University of Alberta

The purpose of this research study is to examine and describe the touching behaviors of Intensive Care (ICU) nurses. It is expected that the findings of this study will increase our understanding of how nurses use touch in their daily practice, leading eventually to improved nurse-patient interaction. One part of this study involves observation of nurse-patient contact in the ICU. If you/your family member agree to participate, it will mean that Ms. Estabrooks will be present at various times in the ICU, and will be observing various activities and interacting with staff and with patients who have agreed to be part of this study. It may also mean that Ms. Estabrooks will ask your permission to visit and interview you after you leave the ICU. These interviews would be about your impressions of touch in the ICU.

THIS IS TO CERTIFY THAT I, _____

HEREBY agree to participate in the study outlined above. I understand that there are no benefits to me/my family member. It is also my understanding that:

1. Patients in this study will be identified by code name/number only.

2. I/my family member am free to refuse to participate, or to withdraw from the study at any time, and that this will in no way affect the care that I/my family member receives.

3. The results of the study may be published, and that if they are, the anonymity of participants will be assured.

I have been given the opportunity to ask whatever questions I desire, and have had all these questions answered to my satisfaction.

Participant	Witness	Investigator
		Date